

BULLETIN

OF THE

AMERICAN IRIS SOCIETY

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MID-ATLANTIC GARDENS

NO. 50

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THE AMERICAN IRIS SOCIETY

COMMENT AND REMARK

■ For some years our genial secretary, Mr. Wallace, has been trying to resign and with 1934 he has succeeded in persuading Mr. B. Y. Morrison into assuming the responsibilities of the office. With the loss of Mr. Wallace as a regular member of the Executive Committee goes one who had the exact point of view of the society member who wants his irises up-to-date and looks to the A. I. S. for guidance. Mr. Morrison, who has made *The National Horticultural Magazine* a leading quarterly, brings us, horticulturally speaking, a broader point of view and yet he is known to us as breeder of irises and as the author of a governmental bulletin on our subject. The Editor is already fortunate in his assistance in presenting this BULLETIN and feels sure that many a member will find him as helpful in the office of secretary.

* * * * *

At the April meeting of the Board a committee was appointed to consider and report as to publication policies and costs. In June it was authorized to establish a permanent Editorial Board, to develop more and better illustrations, and to effect a change of publisher. An annual appropriation permits special expenditure for photography or subjects therefor. A revised program will permit the concentration of annual records in one *additional* bulletin to be issued by the Secretary. The present Editorial Board consisting of the Editor, the Secretary, Mrs. J. Edgar Hires, and Sherman R. Duffy is to be increased to include regular contributors on local or special interests. That we hope for much improvement needs no billboard.

* * * * *

New members and new advertisers will increase possibilities but it is contributions of experience from new sources that will give real life to the BULLETIN. Since the publication of the much discussed 1932 ratings the number of contributors has more than trebled (and almost troubled); the South has had its say, the Mid-Atlantic states of New Jersey, Pennsylvania, and Delaware speak herein, California is in preparation and the millennium of each region appearing in each issue seems approaching. I hope every member will be able to say "We Do Our Part."

THE EDITOR.



Metropolitan Museum of Art

(See page 89)

A PAINTED COTTON HANGING
INDIA XVII CENTURY

A NONAGON OF DELAWARE IRIS GARDENS

JEAN KANE FOULKE DU PONT

■ One day last March, after a spell of such snow, wind, and sleet as did credit to the prescience of the ground hog who peered out into the May-like weather of early February, I went to see my neighbor, Mrs. Hollyday Meeds at "Goodstay," which lies on the western edge of Wilmington. Her garden slopes off to the south, and is tucked in beside an old barn with towering walls and a wind-swept orchard behind it. Nestled in a corner, where the eaves still dropped with icicles, was a clump of the tiny *Iris reticulata*, blooming as gaily as though it were indeed May and bluebirds and blossoms the order of the day instead of snowdrops, winter jasmine, and pussy willows in their furry coats.

Irises seem so frail and delicate that one doesn't look for them in March, and I had even forgotten to expect them in April when I went again to the garden at "Goodstay". One or two low retaining walls within the garden maintain a level for the borders and paths. Over these walls a mass of iberis, aubrietia, cerasium, *Phlox subulata*, *Veronica rupestris*, and tiny dianthus climbed and billowed down again to meet the tulips and cowslips and scillas that grew beside them. *Phlox divaricata* (an uncommonly porcelain blue specimen), the little buff Narcissus "Homespun" and *Tulipa Clusiana*, quivered in the sun and, believe it or not, *Iris pumila azurea*, *p.* Orange Queen and *p. cyanea* were gathered there with wisteria hard by and plum trees like a cloud above. In the center of a flagstoned space a stone basin full of water reflected more of them. Outside the sunken square of flagging a border of green leaves gave promise of the glory to come about a month later, so on the 20th of May I came again to find Red Dominion, Indian Chief, Isoline, Mme. Cheri, Mildred Presby, Deputy Nomblot, Lord Lamborne and Farrandole—making the background on the west for the Seminole, Cecil Minturn and Her Majesty.

On the north Neptune, Ballerine, San Gabriel, Cattleya and Morning Splendor towered high, while inside grew Queen of May and Cecil Minturn.



GOODSTAY

On the east, Mlle. Schwartz, Susan Bliss, Asia, Sensation, and Blue Banner, made both combination and contrast with Alcazar, Souv. de Mme. Gaudichau, a strong blue with vivid orange beard, and Sweet Lavender, as delicately scented as its name implies, but more like an orchid than the aromatic shrub of which it is the namesake.

On the south, pallida Dalmatica, Mlle. Schwartz, Mt. Royal, a handsome purplish red, E. H. Jenkins, Helios, magnificently yellow, Harriet Presby, Wyomissing, and Shekinah seemed to complete the spectrum.

Mrs. Meeds has irises from February until October, the Japanese coming after the Sibiricas and Orientalis, *dichotoma*, following in late July and through August to fill in the succession until the autumn blooming ones begin.

We have so many beautiful gardens in New Castle County that it is hard indeed to choose among them, but I feel that the garden at Winterthur is important to Iris lovers, not only because of the numerous "Firsts" that it carries off at show after show, but because of the beauty and variety of the seedlings that Mr. H. F. du Pont is developing there.

The house and gardens at Winterthur have been so placed among the Brandywine hills that you have stretches of wood, brook, and hillside with loveliest light and shade and a charming combination of wild and formal garden.

To reach the Iris garden one follows a winding road which leads past a steep bank with retaining walls and terraced slopes. Here are pits full of azaleas and other tender plants, and cold frames full of seedlings. The sides of the pits and frames were concealed by masses of periwinkle flanked by lavender Iris, and *I. Flavescens*. *Phlox subulata* (the latter past blooming, but an excellent ground cover), periwinkle and iberis with occasional Johnny Jump-ups, Thrift, and pale pink dianthus edged the walls and caught in the cracks. Iris *graminea* and *cristata* were planted along the sloping walk beneath low flowering trees, azaleas, and rhododendrons. At the occasional steps *pseudacorus*, a purple *sibirica*, and *I. Josephine* (an early dwarf, creamy-white, and fragrant) grew so that their heads kept level with the ascent like a magic carpet. Framed by towering tulip trees, grey beeches and old oaks, lay a great stretch of grass with such a mass of color sweeping across it that I felt as though a rainbow must have paused above and left forever the imprint of its loveliness.

Masses of a pale pink seedling nestled in beside Troost and Mme. Chobaut whose pearly standards and creamy, brown-veined falls glowed against Isoline and another seedling much like Amber. Next to that Yellow Moon, and another seedling almost the color of W. R. Dykes without so much size, then a splash of white, an almost pure cream seedling. Midway stood a bank of Quaker Lady rather tall and insipid and not especially good with the pale yellows below, but excellent from the other side where it formed a background for Mildred Presby and Eleanor, lavender-white, tinged saffron standards, with magenta falls veined white. A much more red and copper neighbor was followed by another seedling suggesting Alvara and one distinctly red orange-copper without any hint of purple, magnificent as a crusader beside the velvety Archeveque with orange beard—beyond them George V. Then came a bewildering array of gorgeous purplish copper, seedling S. 24, with Shekinah and more yellows, Shrewsbury, Souv. de Mme. Gaudichau, May Rose, Ehrich, much taller and more like a pallida, Ballerine, very tall and beautiful, much benefited by light shade from an apple tree near by, Apricot,

Ann Page, a lovely pale blue seedling and then, separated by a wide band of deep soft grass—Fairy, the pale Mme. Chereau, pallida Dalmatica, Lohengrin, Nella (absolutely white, except for a slight purple veining on the haft and an orange beard), and more and more yellow seedlings in a bewildering variety of shades and shapes!

Late Hugonis roses and a pale orchid-lavender lilac (*Syringa* sp. Hers) with fragrant feathery panicles, seemed to reflect the glory of the Irises and to lead us on through enchanted paths until we came out on the western slope to find the late afternoon sun slanting through *Malus Ioensis* to catch and light up the glory behind us and to disclose what we had not noticed before—that the bordering woodland was in itself a glory of white rhododendron, azaleas, sweet hesperis, white violets, lilies-of-the-valley, may-apples and wild geraniums.

On the 23d of May I went, still rather overwhelmed by the mass of color at Winterthur, to see “Hillgirt Mill,” the country house of H. T. Haskell, Esq. The garden there is close to the house—in fact it seems to encircle it almost tenderly shutting in an especially charming bit of sunshine, scent and color, and to emphasize the peace and serenity of the Brandywine meadows which lie about it.

The old stone farm house stands in an open field with an orchard behind it. Only five years ago little had been done to make a garden. Now there is a wall built of weathered stones, the hand-split shingles of its coping are almost 100 years old, and the box hedges and pear trees and hundred-leaf roses look as though they had always been meant to be together, as indeed they were, for it is part of a very old garden which has been brought piece by piece and re-established here. We passed through the main garden to the space between the house and wall on the north-west. It is shut in on three sides, an old ivy-covered wood-shed making the third part of the enclosure. The finest tree box I have ever seen has been placed in the west corner, and a dripping basin of crystal clear spring water overflows slightly to the right to encourage tall, pale forget-me-nots, swamp iris, cowslips, and johnny jump-ups to a rank growth. Great sprays of bridal-wreath, Hugonis roses and Persian lilacs leaned across the wall from their vantage ground behind it to mingle with the *Clematis montana* which trailed delicately across its face.



HILLGIRT MILL

A most interesting irregularity of shape and height of border is obtained by small retaining walls running from 8 to 18 inches in height. The little pink and yellow rock rose (*Helianthemum*), snowy cerastium, aubrietias and saxifrages tumbled down these walls and a few Siberian Iris together with palest green ferns stood at the bottom, stiffly and perhaps a little shyly, against this mass of color. An enchanting feathery yellow dicentra, *Gypsophila repens*, and "Plumbago Larpente" caught precarious footing in the flagstones and scrambled up again. In the beds were Flavescens, Ballerine, Corrida, Drake, a celestial blue, Gold Imperial, Souv. de Mme. Gaudichau, Georgia, charming lavender rose, and Calais, a soft pale yellow, giving the right to call it the Iris garden, although Mrs. Scott's columbine, clumps of salmon poppies, hesperis, cream white heuchera and *Anchusa myosotidiflora*, violas, white violets and delicately handled iberis almost left me ready to count, to be sure that Iris *did* predominate!

Against the whitewashed house were late pale pink azaleas, ferns, Iris Delicatissima and again white violets. In the center

Iris Mme. Chobaut, more pale forget-me-nots and a mass of pink and yellow long-spurred columbines with *Phlox divaricata*, veronica and ajuga, spilling out on to the flagstones.

I had never before seen Iris grown in such close quarters and wondered that there was no rot or slime, although the pavement and wall were mossy and there was a feeling of damp luxuriance quite opposed to my ideas of sun-warmed roots and dry well-drained position. The gardener assured me that he had no trouble with any of the plants although the full sun really caught them only for an hour or two before noon. He said that Calais did better than Flavescens and recommended dusting with lime as soon as the blooming season was past.

As we returned to the main garden, wood hyacinths, *Galanthus*, and *Iris cristata* still bloomed beside the over-arched path, and as we came out into the open sunlight I was struck by the vigor and grace of the low growing box hedges, not austere formal and closely clipped, but loose and full of character. Old pear trees, wide paths covered with tan bark, stone edging sunk deep so that only the moss-covered top showed, were details that I hardly saw and yet could not help feeling. A mill stone sunk at the end of a path made a sundial with the hauntingly melancholy admonition "Seize ye present moment ere evening draweth nigh." It was dated 1702, and indeed that was the period the garden seemed to have caught and kept for the French *Dianthus Hélène*, achingly sweet-scented, baptisia, yellow lupines, foxgloves and Canterbury bells just showing color, old, rose-scented peonies, thalictrum, aconitum, lavender funkia and Sweet Williams were gathered in the box-edged beds; Madonna Lilies (brought on in pots), day lilies, late Persian lilacs and lavender and yellow iris crowded against the wall or bent over the lead fountain whose grey doves forever guard the drinking place of wren and thrush and catbird. Fuchsias edged the stone terrace before the house, and giant box framed the view across the hills. Below the mill race turned its great wheel, and the mill pond, now a swimming pool, mirrored the loveliness above it.

I must not risk wearying you with detail, and so shall only select one or two points of especial interest in some of the other gardens I visited, although many of them were outstanding as a whole, and it is hard to know which to choose and which to pass by.

In Mrs. Charles Higgins' garden the close cedar fence was a mass of single roses in various shades of "Tea rose" pink, apricot yellow, and silver-white flushed copper. These were the very hardy Bloomfield climbers, everblooming, with dark shining foliage. In a short time they had covered perhaps 80 feet of fence. You can imagine how lovely they would be as a background for Mlle. Schwartz and yellow day lilies, or *pallida Dalmatica* and Gold Imperial, for instance; especially if a kindly fate added *Cotoneaster erecta* (picturesque and irregular in shape), peony Solange, pale salmon poppies, blue flax, creamy white heuchera, johnny jump-ups, *Alyssum saxatile citrinum*, nepeta and lemon-scented thyme.

This year Mrs. Donald Ross carried off the sweepstake and the Garden Club of America Medal at the Wilmington Iris Show. Her garden is a new one, but is charmingly set and she has certainly mastered the art of growing specimen iris. The upper garden had a grey stone wall with rhododendrons, tree box, apple trees, and a vigorous border of lilies, hesperis, columbine, thalictrum, and charming lavender violas grown from seed. Clematis (*montana*) trailed along the flat stone coping of the walls and Irises Mlle. Schwartz, Cecile Minturn, Mt. Penn, Shekinah and *pallida Dalmatica* grew in irregular clumps among the other lighter flowers.

Below the summer house were two wide bands of color with grass on either side. One does not need to describe them. It was like having the best in any good catalog come to life, and I shall only name them to show you that in Delaware they are eminently successful, grow to great size and perfection, and seem to like our soil and climate. Cardinal Handon, Orion, Ballerine, W. R. Dykes, Ophelia, Nene, Robert W. Wallace, Sensation, Yves Lassailly, Cinnabar, Mme. Durand, Tremendous, Mary Gibson, Mary Barnet, Indian Chief, Santa Barbara, Moa, Dolly Madison, Sir Michael, Dr. Charles Mayo, Achates, Alcazar, Micheline Charraire, Mildred Presby, Hyperion, "Giant Baldwin," Zaharon, Coronation, Mme. Cecile Bouscant, Pioneer, Mrs. Valerie West, Morning Glory, Purissima, Yolande, Lent A. Williamson, Leonato, William Mohr, Sachem, Pink Satin, Dominion, King Karl, Edward V. Sherwin-Wright, Apricot, and Siberians Butterfly, Perry's Blue, Mrs. Perry and Bob White.

Mrs. William C. Spruance has managed to supplement the native trees and shrubs on a shaley hillside until it is a thicket of ferns, *Magnolia glauca*, trumpet vines, fox grapes, *Cornus kousa*,

Cornus Mas, bittersweet, hawthorn, evergreen barberry, wild roses, holly, styrax, and *Malus Caroliniensis*.

It is almost incredible that in such shallow soil one can find *Iris cristata*, maidenhair fern, white violets, trillium and the marsh magnolia. Perhaps it is because half-rotted logs have been imbedded among the trees on the hillside and the loose dirt and leaf mold has blown or washed against these barriers and made a foot-hold from which they have become established and spread.

The surface water from above has been led into rough stone ditches and here flourish royal ferns, the interrupted fern and the sensitive fern with irises *pseudacorus* and Dorothea K. Williamson enduring with apparent equanimity both flood and drought. Galax, shortia and partridge berry made a dense ground cover and spikes of fringed orchis and cypripedium and *Iris cristata* bloomed in the open spaces or under the light shade of white dogwood and Judas tree.

The crowning triumph of this wild garden was the birds' feeding place. *Iris verna*, pale pink and delicate blue, edged the pool; *Rosa Hugonis*, barberries, spice bushes, cedars and hemlocks made a wind fast enclosure. There, with *Scilla nutans* and blue periwinkle, *I. hexagona* and trillium, was a tangle of jasmine—the sweet scented yellow jasmine of the far South and the little bell-shaped clematis from Carolina.

About 1905 or 1906 some one showed Mrs. Irénée du Pont a picture of a Japanese garden with a summer house almost hidden by iris. It interested her so much that she made inquiry and finally arranged to import some Japanese iris. In the picture it appeared as though the iris had been planted below the level of the surrounding ground and were kept constantly wet, so she endeavored to follow this plan.

They did not do at all well. At last Japanese instructions were obtained and it turned out that she had done exactly the wrong thing! She should have raised the bed at least six inches and planted the roots shallowly just below the surface. They should have been watered freely just before the blooming period, but not at other times. The ideal arrangement would be to flood the roots a week or two before blooming, but after that they should be allowed to dry off and finish the season in a dry sun-baked soil. *I. kaempferi* does not like to be disturbed, the longer it is left in one place the finer the blooms become, but if the plants begin to



THE MILL

form a hollow circle they should be taken up, divided, and reset.

Mrs. du Pont has almost all of her original plants although she has moved from Wilmington to the country near Granogue. The present garden is set on a high hill. There are no large trees near the garden itself, so that one has a feeling of immense space and unrestricted view, but it is surrounded by flowering trees and shrubs and has woodland below and beyond it.

Just over the brow of the hill a shallow depression has been made into a rock garden with natural outcroppings and added walls, terraces and pools. Here have been set the original Iris from Japan, surrounded with every sort of hardy garden flower, tamarix, bamboo, the dwarf Japanese yew, Mugo pines and other exotic evergreens. Ferns, heather, and tangled vines give a feeling of wildness and charm that is very unusual in an artificially made rock garden. *Cristata*, *pumila*, *pseudacorus*, *verna*, *versicolor* and *sibirica* are forerunners of *I. kaempferi*.

During May and early June the opposite slope is a mass of delicate lavender, a bearded iris whose name I do not know. Later

these hillsides are capped with a mass of the Japanese raised from the seed of those adventurers from Japan. Some of them are the results of careful selection and hybridising, some the children of sun and wind.

Mrs. Coleman du Pont's "Mill Garden" is centered about the stream which flows through a disused farm. The land has not been cultivated for years and many native plants and shrubs have found a foot-hold on the hillside.

The neglected orchard conveyed at once a feeling of nostalgia and peace which is hard to put into words. The sound of the brook murmuring among the pebbles or laughing over the little waterfalls seems like the voice of the spirit of the old mill that once ground the grain for all the country side, but now lies completely covered in the bottom of the valley which has been inundated to form Wilmington's water supply.

The treatment is simple; thorn trees, locusts, swamp maples and tulip trees and ashes are abundant and many willows edge the banks. Watercress, marsh marigolds, cowslips, forget-me-nots, and cat tails stand half in, half out of the stream, while sweet hesperis, yellow calla lilies and *Iris pseudacorus*, waist deep in meadow grass and clover, stretch gaily up the banks to meet tall clumps of blue and purple siberians. Half hidden in the flowers a laughing bronze baby clutches two slippery frogs and Pan silhouetted against a bit of sky teaches the tiny things to pipe.

Native columbine, pale green ferns and white violets clung to the rocky edge of a deserted quarry and everywhere was the heart-stirring scent of wild grape. As we came out again we saw the far fields white with daisies trooping down as though to attend the Court of Snow Queen and the Queen of May, set in a sunny hollow half shaded by dogwoods and rhododendron.

Ever since 1802, when du Pont de Nemours settled in Delaware, the Powder Yards have been kept like a great park. Trees and plants have been undisturbed and many unusual varieties have been added both from France and from other parts of this country.

When the neighborhood became more closely settled and it was impractical to continue longer the manufacture of explosives here, all the Powder Yard was sold to members of the family and the old houses which had gradually been given up are now being restored together with their gardens. Mrs. Francis Crowninshield

has inherited from her father, Colonel Henry du Pont, the part known as the "Upper Yard" which contained the house of E. I. du Pont, the first office of the Company, and the Salt Petre Refinery. Starting with the foundations and pits of the salt petre refinery she has achieved a very interesting effect. She has left untouched the old retaining walls and winding steps, the deep oval pool to afford water for the bucket brigade in case of fire, and the mill race and dam. She has opened up the arched furnaces and brought out the great iron pots in which salt petre was crystalized, and she has added pools and stone work so that it is hard to realize that we are still in Delaware and not in Italy or Spain.

I am always entranced with the espalier fruits against the high walls, the soft dripping of the surface water as it creeps through crack and cranny and trickles down the old buttresses and by the *Clematis montana*, *virginica* and *Jackmani* in their seasons, and the hawthorn and euonymus with their scarlet berries.

There is a mass of iris between the Mill Race and the Brandywine and again between the race and the foot of the garden. In the garden itself there are unusual and lovely Siberians, spurias, as well as primulas, white, blue and yellow.

It is with real regret that I see the end of the season. The opportunity to write about them has proved a magic key to my neighbors' gardens, and I can hardly bear to give it up. I hope that next year some of you will come to see for yourselves the beauty and variety of Delaware's iris gardens.

FIVE LOVELY NEW JERSEY GARDENS

ALICE R. WELLS

■ There are few iris specialist's gardens in the vicinity of Plainfield, but many where lovely pictures satisfy the eye. In these are not always found the newest varieties, but the time-tried kinds that are useful for mass growth and afford joy to the gardener because of their sturdy habits.

The garden of Mrs. Edward Harding is an exception but its owner's interests are so wide that the irises, individual and in group arrangements, must one day have a chapter to themselves, perhaps from the delightful pen of their originator and grower.

In May, stretches of Florentina and its companion the old blue flag with Clara Butt tulips against massive Tartarian honeysuckles, showered with pink bloom, make a lovely beginning to the bordered path which is the feature of Mrs. Charles A. Eaton's garden in Watchung. The path meanders down, bordered by shrubs and perennials which follow the sloping contour of the land and the gently turning walk, to a group of tall native trees and cedars. There it turns, slips down by stone steps to meet the brook and wanders up stream between brook and naturalistically planted slope, to climb more stone steps with little pools on either side, to the swimming pool above.

Iris is featured all down this path. Mrs. Alan Gray is lovely against Persian lilacs. There are long drifts of pale pallidas ending in a mass of Olympia poppies, and beyond these pale yellow and fawn-toned irises are blended. Long-spurred columbines rise here and there among the irises as one moves down the path and the masses of color change. Deep rose shades merging into purples, find themselves beside the whites, pale pinks and purples of the hybrid mulleins and lupines. Thelma Perry, Prince Lohengrin with *Thalictrum dipterocarpum*, and the host of perennials of late May and early June; pale blue veronicas with coral poppies, pinks, *Salvia pratensis*, are grown here in the wide sloping borders.

Where the steps drop down at the end, the brook is widened into a little pool beside which are Siberian and Japanese iris plantings. The effect is particularly suited to the latter as one

looks down from the steps on the broad wavy surfaces of these gorgeous "plates" of color.

The returning borders are naturalistic in type. Early spring shows hosts of the small bulbs, masses of trillium too, on the slopes at the sides. Back by the swimming pool one finds a semi-circular stone seat and from here one looks up the pool to plantings of Japanese iris with elms just away from them, and beyond the irises one of the willows with which the pool is bordered. The pool and background furnish a peculiarly happy setting for the many varieties growing here whose bloom in July is doubled by its reflection in the water.

Mrs. Irwin Taylor's garden she calls "just a friendly meeting place and not a collection of named varieties." Here in a semi-formal setting for her Japanese iris, the garden opens towards the south and is rectangular in general contour, but the plan of planting conforms to a large oval grassplot in the centre. At the southwest corner of the rectangle is a really lovely clump of birch trees with rhododendrons and laurels growing at its base. Against this background of woodland beauty her plan uses the rich deep blue and purple shades, Koki-no-iro, Martha Kemp, Patrocle and Totty's True Blue.

Growing further afield is a group of amethyst and purple lavender with an occasional high light of white or white with rose; Painted Lady and Moonlight Waves. For the deeper tones of this group are Amethyst, Atlanta and Helen Wills, and over and beyond come such blues as Constance, Fascination, Iso-no-nami, Romance and Uchiu. The group of white birches and the deeper shades of the evergreens complete this delightful canvas of nature's material.

In Mrs. Stephen Van Hoesen's garden the march of irises through the long season displays the horticulturist's care for perfect material and excellence of form and growth.

The plan of the upper garden nearer the house is undergoing revision this year, but both the dwarf and tall bearded iris will have their places in the new more formal arrangement. In this garden one looks across a bed of perennials and roses that are to come later, to a collection of Siberians in mass planting, lovely in their period of waving full bloom. The tall-bearded irises are used in borders with perennials as well as in beds devoted to iris only; the latter hold the choice specimen varieties.

From an easy garden chair under fine old trees one looks across the pool of informal type, in a rocky corner of which is a splendid clump of Emperor and sees many pictures—Blue Velvet and Pink Satin. We like to compare nature's texture to our man-made weavings! How lovely the thirty foot line of Alcazar! Quaker Lady with flame-colored Oriental poppies and also masses of Ambassadeur!

The perfection of the specimen evergreens is a delight, the delphiniums, the rose arches, but the culminating glory is a sheet of Japanese irises, sloping gently down to its background of trellised roses on one side and shrubs on another. Just rightly placed is a weeping-willow which gives a satisfactory Japanese note beyond the stretch of almost level color, with here the blue and rosy red of tall Katherine Perry, or white and blue Jeanette Perry rising above, and there Van Hoesen or Prosperpina, clumps of shorter growth, dropping below the mass.

Late afternoon shade falls gently on this sea of color, and one would go far to find a more distinguished display.

The background of Miss Halloway's garden is a fine large maple and two magnificent elms, whose branches almost sweep the ground. Shrubbery borders the garden below these and on one side are roses on trellises, while a fence with hollyhocks guarding it in season, separates the growing garden from the out-door living-room garden of the house.

The fine bloom of a specialist's enthusiastic care flourishes here, and the garden is not without its utilitarian aspects, for vegetables and flowers face one another across paths, and in many cases irises are used as borders to the vegetable beds.

Iris cristata massed in a long border, and elsewhere *tectorum* blue and white, make delightful pictures in early spring. An enjoyable group has a dwarf red purple seedling, with white arabis, Daphne, and Triumph tulip, Lord Carnarvon. At the corner of the barn is a planting combining Princess Beatrice with Goliath poppy. Coronation with a long and early blooming season, is striking with Lady Lilford; while later flanked by Germaine Perthuis and Cardinal, it showed well against peony, Kelway's Glorious.

Duke of York and Asia make a fine background for Pioneer, Micheline Charraire and Coronation. Peonies Walter Faxon with Ballerine, and Solange near Ambassadeur, are in mass planting.

Sibiricas Blue Wing and Blue Star with their contemporaries, cherry-colored peony Defiance and a number of red Japanese are lovely, and Kingfisher Blue glimmers beside the silvery pink of Princess Matilde. Red Raider is neighbor to these and particularly appealing too are Moonlight Magic and White Dove. The species *setosa* and *notha*, both blues, are graceful in front of Marie Jacquin and Primavera peonies, and a cluster of *Iris dichotoma* with a second bloom of daphne in late July provides a point of interest in a nearby border.

Specimen iris, and one of the largest collections of the newer varieties in this region, are the principal interests of Mrs. Chester Lawrence yet her garden has thoughtful arrangement in its masses of color. The older varieties are used as borders for shrubbery and on banks where daffodils and other early bulbs, white violet and *Phlox divaricata* have their place, and the newer kinds in more formal beds at the foot of the slope, where later a few perennials, phlox predominating, are grown for summer color.

Indian Chief is a favorite here as well as both Midgard and Coppersmith. Vesper Gold, Coronation, Tuscan Gold, Pluie d'Or and Desert Gold make a glowing mass of color. Named varieties of Sibiricas arranged in beds with peonies are massed nearer the shrubbery and, in others adjacent for July bloom, are the broad shimmering petals of the Japanese iris, deep purples and blues toning through paler lavenders and blues to white.



Mattie Hewitt Edwards

THE IRIS BOWL
[18]

THE "IRIS BOWL"

JOHN C. WISTER

■ The "Iris Bowl" on the estate of Mr. and Mrs. Horatio Gates Lloyd of Haverford, Pa., which is so famous among Philadelphia gardeners, was planted about twelve years ago. The original plan was made by Mrs. Lloyd and was drawn to scale by Mrs. Lloyd's architect.

The "Bowl," which is about 110 feet across, consists of a series of circular terraces, each about ten feet wide, with a total change of elevation of about five feet. There is a four-foot grass path in each terrace with a three-foot iris bed on each side. The tallest varieties of irises have been used on the top terraces and the dwarfer forms on the bottom terrace, thus accentuating the drop which looks much deeper than it is. On the top level outside of the Bowl large triangular beds have been made on the corners, two of which have been filled with Japanese iris and one with a great mass of Sibiricas Perry's Blue and the fourth with some of the lavender bearded iris like *pallida Dalmatica*.

While the garden is mostly iris, some rock plants are used in the retaining walls and a few bulbs on the edges so that there is color there early in the season.

The full circle is cut into four quarter sections. On one side from the top down the colors begin at white and come down through the lavenders and then on the opposite side come up into deep blue purple and pink. The other section begins with yellow at the top, running down to tan and brown and on the opposite side comes up from pink into deep bronze. This is the present color scheme but a number of others have been tried in various years. The color effect is very pleasing as enough plants of one variety are planted to give a solid color mass.

Having been started in the era before our modern large flowering irises were available in any quantity, most of the garden has been in older varieties. Of recent years, however, many of the newer kinds have been added for trial and may be found among those old timers which have been retained. Some of the older varieties, which no longer seem worthy, have been put in a special

garden on another part of the estate. This has been nicknamed "the morgue" and is kept as a horrible example of what the old time irises were. Occasionally, however, some of these horrible examples rise up to confound those who believe only in the newer things by blooming so well that they seem better than many of the latest novelties.

The list of varieties in the "Bowl" is quite long and it is not necessary to go into in detail. Many older varieties like *Flavescens*, *Aurea*, *Queen of May*, *La Neige*, *Quaker Lady*, *Juniata*, *Pocahontas*, *Anna Farr*, *Alcazar*, etc., are grown in quantity. With them are more modern things like *Dream* and *Susan Bliss* in the pinks, *Shekinah* and *Primrose* in the yellows, *True Charm* and *True Delight* in the whites, and many of the *Dominion* race in the deep reds and purples. In smaller quantities are to be found such newer varieties as *San Francisco*, *Los Angeles*, *Dauntless*, *Rameses*, *Pluie d'Or* and many others.

Mr. and Mrs. Lloyd have been exceedingly generous in allowing persons who are interested in gardening to visit this iris collection. It has been opened on special days for many organizations such as The Garden Club of America, The Pennsylvania Horticultural Society, and The Ambler School of Horticulture. Many American Iris Society members from all parts of the country have been welcomed there, the most recent time being on May 27, 1933, when over fifty of our Pennsylvania, New Jersey and Delaware members enjoyed its flowers. The privilege of taking photographs has, however, never been granted to outsiders nor have photographs of the "Bowl" been allowed to be published in any of our horticultural publications. As one of the organizers of our society, a charter member and a former director, Mrs. Lloyd has graciously allowed us to publish in this BULLETIN a photograph of the "Bowl" taken several years ago by Mrs. Mattie Edwards Hewitt. We are very grateful to her for letting us have this illustration for our Middle States number of the BULLETIN. We wish also to thank her for the gracious hospitality she has extended to so many of our members, who have come long distances to enjoy this beautiful garden.



Mattie Hewitt Edwards

THE IRIS BOWL

[21]



IN MR. DOUGLAS' GARDEN

BREEDERS' GARDENS

M. E. DOUGLAS

■ In May I made the trip to Pittsburgh to see Mr. Charles H. Hall of happy memory for his Aliquippa, Chartier, Edgewood, Elsinore, etc. Mr. Hall lives in a suburb some few miles from the city, reached by splendid winding roads over lovely rolling hills.

Our member, Mr. T. L. Pillow, had previously written me enthusiastically about Mr. Hall's most recent seedlings. After my arrival I had cause to wonder whether all the activities of the Pittsburgh Bureau of Highways had ceased for the time being, inasmuch as Mr. Pillow left his duties there for two whole days in order to escort me to and from Mr. Hall's and other gardens. While Mr. Pillow had not told me of it, I found blooming in his own garden many modern irises and in addition hundreds of his own seedlings some of which may be heard of in due time.

Mr. Hall formerly resided near Baden, Pa., in the Ohio Valley, some 20 miles from Pittsburgh. He and Mrs. Hall removed to Ingomar in 1915 to get away from the smoke and the fogs. Perryville and West View are the towns nearest to Ingomar. Bellevue, Ben Avon, Avalon, Emsworth, Edgeworth, and Sewickley can be reached from Ingomar by motor in 25 to 30 minutes. Mr. Pillow must have shown me all of each of them.

It was in 1911 that Mr. Hall's real interest in Iris began. He heard that our member, Dr. D. A. Atkinson, of West View, had an extensive collection, and at flowering time made several visits to see them. There, upon seeing that some 1,500 Atkinson seedlings were then on the way, Mr. Hall determined to try his hand at it. I had hoped to meet Dr. Atkinson but a serious illness which confined him to a hospital prevented.

Mr. Hall planted his first iris seeds in 1912. Thenceforth, such planting of iris seeds became for him an annual pleasure.

"Not until 1916," he advised me, "did I raise any seedling that I thought good enough to be given a name. In my seedling plot of 1931, there were 4,200 seedlings; in my 1932 plot, 7,200; in the 1933 plot (the one I saw), 7,200."

"In my breeding," Mr. Hall continued, "I have worked above all else to get clearness and beauty of coloring."



IN MR. DOUGLAS' GARDEN

To my question as to which of his seedlings he considers superior to the others, he replied: "I hesitate to say. Judging by its performance this year and in 1932, probably Fairylea comes close to meriting such distinction." Later, he added: "Possibly you may be interested in hearing that the plant of Guyasuta in Bronx Park, New York City, received a rating of 85 from one judge." This did interest me, for upon referring to my field notes previously taken in his garden, I found that I had given it an 87. I liked Fairylea, Guyasuta, Naronda, and Rosemont in the order named.

Doubtless, somewhere you have seen green hills and far vistas dotted here and there with timber. In such a setting you can doubtless imagine a homey white modern residence along Colonial lines, with some old shade and wide lawns—all seen against a heavy background of nearby woods, and with gardens close by, and gracious Mrs. Hall presiding over all. Such is Mr. Hall's home and property of four or five acres. Here it is that his breeding plans are made and here his records of each trial and result are painstakingly kept. Labors of love, gentleness, infinite patience—and withal, modestly related.

Earlier in May I made several trips to see the Irises of Mr. H. L. Dannenhauer. If you know the thin grayish sandy soil of Southern New Jersey you understand his growing conditions there at Mays Landing, which is in the latitude of Havre de Grace, Md. I found him with both hands badly and freshly scarred by burns from what had threatened to be a serious fire.

His Gobelin Red (1927) I was desirous of seeing either because of its name or because of precautionary comments read about as if there were something the matter with it. Mr. Bliss was right; it is easier somehow to interest one's self in a variety having a name that pleases, if one has not seen the flower which I really found in splendid form at Mr. Wister's later.

This is the first year that I have visited iris gardens with the definite intention of making full descriptions and ratings for report and despite the labor involved I already see more even in the varieties casually inspected for my notes.

THE WISTER COLLECTION

R. S. STURTEVANT

■ In our president, John C. Wister, we have an innate collector, for he is as famous for his lilacs, his tree peonies, his daffodils as for his irises, in fact if there were societies for tulips, deutzias, azaleas, mock oranges and I know not what, he would be famous in still other circles. With such a handicap, it is most fortunate for the garden visitor who is not a collector, that Mr. Wister dwells, not on a barren prairie but on a sloping hillside, tree-clad and revealing an inherited love of growing things. In fact before we turn in from the boulevard and between old stone posts we may note his sympathetic treatment of natural scenery. To the right is a stretch of meadow park with rising woods beyond and further along to the left is a shaded hillside where recent plantings of flowering dogwood, azaleas, ferns, and mountain laurel form lovely pictures. Philadelphia is known for its civic center, its miles of park studded with historical mansions and Germantown also has its atmosphere of historical and natural beauty.

Within the gates the drive winds steeply under its big trees to the old house. There are gigantic specimens of this and that, broad sweeps of azalea, rhododendron, or *Cotoneaster horizontalis*, and everywhere glimpses of lawn and broad grassy walks. It is in such a setting that we find the shrubs and shade-enduring treasures but it is in an old sunny vegetable garden that we come upon the sun-loving irises. In the old days a complete collection occupied but a few borders—the latest importations still in frames and they enjoyed delightful backgrounds of magnolia, fringe tree, and dogwood. Now, however, the collection (and I suspect it is as near complete as ever) demands an expanse and we miss the intimate setting as much as our chance for a shady spot as we rate.

I think "Jack" once had a predilection for an alphabetical (Check List) arrangement of varieties and he persisted therein for at least two three-year periods thus securing perfection twice in six years (until the new introductions came out). This method of planting coincided with his arduous labors in our Check List and the next stage rather reflected our "Policy of Awards"—standard varieties relegated to alphabetically arranged beds—

novelties planted year by year in additional lines. He (and the A. I. S.), however, had long talked of a color classification; when it was published, his planting strove for this new goal. Thus you would now find probably the most interesting planting of irises (and not only of Bearded Irises) in the country—quite comparable, I imagine, to the planting at the Wisley Trial Gardens in England. Such a color classification planting develops good sweeps of color as the misrepresented rogues are culled out from year to year. It is also the best possible plan for the comparison of similar varieties or for the study of comparative garden values. When we add good normal culture rather than high pressure forcing we can also study vigor safely at least for the climate of Philadelphia which has its unseasonable winter warmth at times. In fact only the sincere adherent of a specified red, or white, yellow or blend will fail to appreciate a planting which may prove that your favorite remains unrecognized among its near competitors.

I must confess that I am frankly sceptical of achieving a really successful color classification or planting—as in trying to represent spectrum colors plus neutrals and tones on a flat surface we need a spherical field and perhaps a touch of a fourth dimension. But the patience of our president is tried in many other ways and he has accomplished a most instructive result—if only originators would cease to introduce for a year or two, the problem might be solved.

A restricted use of this plan is clearly indicated where the designer wishes masses of color (especially in a limited area) and the collector's instinct requires infinite variety. Though Mrs. Lloyd is not primarily a collector, her "Iris Bowl" proves that a mosaic of carefully selected varieties may form a relatively simple color scheme of definite appeal. From the point of view of the commercial grower the grouping of similar colorings is greatly to be avoided—rather should he ape the breeder who permits a *Citronella* or an *Aphrodite* to rear its head from a herd of lavender seedlings.

And when you visit Mr. Wister in iris-time wear blinders or early in the season you will find yourself inspecting new daffodils, and later you will revel in tree peonies and bask beneath flowering apples, or, still later, find yourself among the peonies, the irises forgotten. Of such is the Wister collection.

IN A SMALL GARDEN

MARY JUDSON AVERETT

■ By this season's count the irises in my garden number one hundred and sixteen species and varieties, too many for correct garden decoration but not too many for me. Most of them grow on and about a terrace with a southerly aspect, back of the house, a little uphill, and in full view from the windows to my everlasting delight. The terrace has a grass panel 58×15 feet, longest from east to west, with double borders running its length on each side. Next the grass is a four-foot border, then a fourteen-inch work path, and beyond this on the south side another four-foot border ending at the top of a retaining wall, on the north side a four-foot bank rising steeply to the natural slope of the land. The borders next the grass have been given the best treatment I could afford and every year they are fed peat moss, some form of animal manure, and often commercial fertilizer in the effort to procure here a rich garden loam; but the bank and the border at the top of the wall get only bone meal, wood ashes, and lime. The work paths which have never been dug form a fairly effective barrier between the two types of soil for even at the back the lime does not seem to leach down into the front border from the bank as I had feared it would. As to those nearest the retaining wall no difficulty presents itself probably because, according to Dr. Connors of the New Jersey Experiment Station, there is very little horizontal movement of soil water.

Japanese irises are the feature of the borders next the grass. Clumps of the handsome double white Gekka-No-Nami are planted in each corner and other varieties six feet apart down the length of the terrace on both sides near the front, just back of the heuchera edging. At the back of these borders are late flowering peonies alternating with groups of oriental poppies and either gypsophila or sea lavender. There are some other strong growing perennials with permanent foliage like the tall veronicas, the peach-leaved campanula, a few pyrethrums, but for the most part into the framework of the iris and peony foliage I fit annuals, tall at the back and low in front—phlox, lobelia, torrenia, and such things—to emphasize the regularly spaced column of the

irises for I prefer this alternation in height to an even bank of flowers. Having carefully planted for this form and having chosen my other perennials as foils for the irises, foils of foliage of delicate bloom, I messed it all up by introducing some polyantha roses, puny plants that had to be moved from somewhere else and were stuck in here in desperation with the thought that they would die anyhow and it would not matter. But instead of dying they perked up their leaves and began to grow and to show in every way that things here are just to their liking. Now after three years they are lusty shrubs which cover themselves with sheets of bloom and completely steal the scene from the irises. The white and the pale blue and the pink tinged and the dark violet irises look well with the coral and pink and red roses but I should really prefer these regal irises to be superb and sole in their "insolent beauty" as I had planned. Still so exuberant and persistent are the little roses, so really endearing in their floriferous ways that if they or the irises had to be banished, I should exile the irises.

At one end of these borders is a nice clump of *I. versicolor rosea*, with its pleasantly curving stems, much dwarfer here than in Mrs. McKinney's garden where the soil is in a fine state of tilth. But its low growth and its small flowers make it a nice surprise to happen upon. Diagonally opposite at the other end of the terrace grows *I. fulva*, quite lusty and floriferous but with such a spreading habit as to raise a question of its value as a border plant, though I cannot make up my mind to move it. For I enjoy its placing and its associates. On each side at the top of the steps which lead up to the terrace there is a *Pieris japonica*, next it comes the *I. fulva*, and in front there is an edging of salmon pink heuchera, finely flowered. The copper-colored *fulva* blooms with the heuchera and at the same time the *Pieris* puts forth its new coppery leaves, no carrying power of course but pleasing close at hand.

At the west end of this terrace stands a long bench in the midst of my most precious treasures, for behind the bench a gently sloping bank is solidly carpeted with *I. gracilipes* which grows and blooms with great freedom. It does not give blossoms of as large size nor so many to a fan as Mr. Dole gets by dividing and enriching each year. So far I have divided only when I need new plants and have given as food only a mulch each spring of com-

post, or leaf mold, or humus. One of the pleasures of my garden is the delighted surprise of visitors who pause to rest on this bench and then catch sight of the sheet of bloom at its back. The other treasure here is *I. tectorum alba*, a planting at each end of the bench where I may look down upon its open creamy bloom. These two irises do not seem to suffer from the vagaries of weather as do most of the genus. With both, the petals are firm, the texture glistening, the form well drawn, sure, crisp in outline, and the poise is delicate and assured, aristocratic if ever a flower can be. So much do I enjoy them that I buy special vases for them as cut flowers and as I go about the garden I look always for some new place to put one or the other where I shall see it in passing. One root of the *tectorum alba* tucked in below a stone, with *Daphne cneorum*, *Deutzia gracilis*, and double white arabis for neighbors, has become the most vigorous clump I have, making a picture with its companions which entirely satisfies me—and that is quite a statement to be able to make about one's garden.

At the foot of the steps to the terrace, its beautiful foliage spraying out from a cranny between two huge stones and again near neighbor to *I. verna* in an acid soil planting are groups of *I. graminea*. Mrs. McKinney says of this iris: "It has the rich scent of ripe apricots, and despite the fact that the red-purple and lavender bloom is hidden among the foliage, it is a desirable iris for its foliage alone, low, drooping, and glossy. * * * * The bloom is attractive for cutting, because it carries with its flower scape a glossy green leaf, and in low Japanese bowls of ivory makes a distinguished as well as delightfully fragrant decoration."

The border at the top of the wall and the bank behind the north border belong to the bearded irises, there being no planned color scheme. I simply put in the border on the wall the varieties I enjoyed most close by while the others were consigned to the bank. Gradually, however, I think a sort of color scheme is evolving due to the fact that the way the light falls in this situation so greatly enhances the beauties of some tones. There are no variegatas; Mary Gibson, of the long blooming season, is the only blend; Ambassadeur, Souvenir de Mme. Gaudichau, and the old Jacquesiana are the only really dark ones; a seedling of fine foliage and Seminole are the only reds; and of the amoenas there is Richard II which might as well not be there as it never blooms, but I have not yet given up hope for time seems to accomplish



IRIS AT ORCHARD COTTAGE

The Entrance; Near the Drive; The Iris Terrace

things in my garden that defy effort, and I like this iris, its small size, its clean contrast of color, and its late season. Some of my favorites are: the tall stately *plicata*, My Lady, with Bluet and the free-blooming and altogether lovely pale blue *ceugialti* at her feet; pale pink Dream above the lower Rheingauperlle with the still lower Seminole near by; large clumps of Princess Beatrice and of another form of *pallida Dalmatica* with Argonaut coming in later; small clumps of the late Her Majesty and La Neige repeated down the border with the dainty pink-hearted Simplicity and the superb Ambassadeur for contrast. On the bank, at the very top, Isoline behaves like a perfectly healthy lady standing between pink-tinted Aurora and blue-toned Leonidas both with handsome glaucous foliage, good all summer. At the end of the bank a large clump of White Queen stands in front of a *Spirea van houttei*, a picture in its season. But I cannot possibly go on taking up space with all my enthusiasm; Mr. Sturtevant wouldn't allow it, and yet I have to mention yellows, Primrose and the old Flavescens and Aurea being my pets until Cockatoo came into bloom in the trial bed.

For there is a trial bed. My method is to buy about five new irises each year, grow them in a trial bed for three years, and then put them or such of them as I like especially, in the border or on the bank to replace something not so much to my taste. So the planting is never the same two years running and yet it is never all torn up. My new varieties are chosen either because I have seen them in bloom somewhere or because someone whose taste I like has written about them temptingly—Sophronia being here because of Mr. Mitchell and Cockatoo because I was bewitched by what Miss Sturtevant wrote about it.

At the far limit of my lot rises another bank on which grow the dwarfs and the intermediates, and among them Caprice, for cutting and fragrance, with delicate Seashell. Between these two banks lies my small nursery and cutting garden in which I have found space for bands of *Iris cristata* which so likes my soil that it grows wherever it can find an unoccupied spot and with no attention except to keep it free from borer. For interest I have here also a clump each of *versicolor* and *prismatica*. I used to have several varieties of *orientalis* and *sibirica* but under my conditions they grow so weedy and become so shabby in late summer that most of them have been banished to a sort of no-man's-land

just beyond the fence where they grow just as well and bloom just as well and do not annoy me by their untidiness. One clump of Perry's Blue and one very floriferous unnamed nearly white *sibirica* still hold their places in the borders in sunny spots in my prevailing shade. In such spots also I have found place for *I. chrysographes*, *I. Wilsoni*, one precious root of the lovely *I. pseudacorus alba*, and a clump of *I. ochroleuca*. This last iris does not offer its blooms freely but its stiff handsome foliage is of itself a border ornament, and when it does bloom I have had stalks of it last in water in the house a full eight days, every bud opening with no diminution of quality and but little in size. My old combination of Anne Leslie with pink and crimson pyrethrums holds its same place, and the front entrance to the doorway is guarded, outside the hedge, by two large, thrifty, floriferous clumps of another old favorite, Rhein Nixe, still to me the best of its class.

Among some azaleas and kalmias and pieris I use *I. verna* as a ground cover along with galax, shortia and wintergreen. They are not actually under the shrubs but on the bank below them, running back irregularly. They thrive and bloom and increase here, getting very little sunlight for the whole planting is under a large apple tree and yet the shade is high, not dense, the circulation of air good, and at blossoming time there is dappled sunshine as the tree is not then in leaf. The season of flowers is very short indeed but while they last they perfume the air with a fragrance reminding me of violets, and when not in bloom the dark, glossy green of the leaves has charm of its own. This is the form from the mountains of North Carolina. Among them there are a few plants from near Richmond, Virginia. The foliage of these does not appear to be evergreen either here or in its native habitat, is gray-glaucous, and the flower has a better form than those from North Carolina, that is, it seems a little smaller and to approach more nearly the shape of the bearded iris, holding its standards upright until it withers, while the North Carolina form spreads its standards after it has been open a short time, giving a floppy look to the flower. I offer this comparison somewhat hesitantly as I have not yet enough of the Virginia form to be sure how much the variation of the flower depends upon conditions of weather and season, but the difference in foliage seems to be beyond doubt.

Even though experience has taught me what to expect I always lose my breath on entering an iris garden in full bloom, as perennially fresh and entrancing as sunrise, sunset, moonlight, rainbows, or any other manifestation of light, but walking along its paths, looking closely at the individual plants I become disappointed unless I find variety, delicate differences of color and of form, of height, and branching and habit and foliage and I like to come upon some flowers exquisite in color and form and pattern near at hand but quite lost and unsuspected at a distance, qualities particularly valuable for adding interest to a small garden. So I have little sympathy with people who complain that there are too many varieties of irises. Too many, perhaps, for those who have ambitions for a comprehensive collection and find themselves balked by the multitude, but for beauty, for infinite variation, and for reverent wonder, there could not be, now or ever, too many kinds of irises.

New Jersey.



SUCCESION OF BLOOM FOR THE SMALL IRIS GARDEN

KAY KERSHAW MECHLING

■ Not every iris lover is blessed with broad acres from which to choose the perfect place for the Iris Garden where they may reign supreme. Many of us face the problem of what can be done to prevent injury to our iris when the iris garden is also *the* garden, and must have a succession of bloom all summer long. A few of us are limited to a "back yard," but even the ordinary back yard, bounded on three sides by uncompromising board fences, and on the fourth by a greedy lilac hedge, is amenable to treatment.

The garden in question is an oblong back yard, one hundred feet by fifty. Fences on both sides and at one end, the lilac hedge at the other end. Beds eight feet wide were dug out along the sunny side and at each end. Double curves across the front of each bed soften rectangular outlines, and the consequent bays and coves give a pleasing effect of distance.

A wind-break is an essential for those whose gardens lie beside the Delaware. For here, without a moment's notice, the boisterous spring winds blow unchecked across a mile of water, and wreck one's choicest iris at the height of its bloom. As shrubs tall enough for a wind-break run into a lot of money, a simple arbor was built with a "herring-bone" brick path down the

center, edged with poet's narcissus in early spring. A "dollar collection" of grape vines provides shade for the summer months and gives a vista of deceptive length looking toward the tea table and settle at the far end.

The lilac hedge (and the same method is good for any other hedge) was promptly rendered harmless by digging a narrow trench two feet in depth and about a foot in front of the spread of the lilac branches. Old boards were covered with creosote and placed three deep in the trench, with ends overlapping to prevent the intrusion of roots.

Beginning at the back, that sound old rule, groups of five Crown Imperials were planted at even distances. In early April the unbelievable gorgeousness of these with their crowns of pendant orange bells carried proudly on four foot stems will cause any visiting gardener to blink and scurry home for catalogues. Between the Crown Imperials are a succession of tawny lilies, *tigrinum Fortunei*, *Humboldtii*, *superbum*, and their tall brethren. They, and the Crown Imperials, are in nail kegs with bottoms pierced for drainage, and filled with the rich soil they all rejoice in but which iris will not tolerate. Behind this double barricade of boards and very young barrels, one's iris is safe from even the most enterprising rootlet. There are two rows of iris, the higher ones at the back, and lovely groupings are framed between tall pillars of Siberian iris. (In this bed the pinky white of Mrs. Rowe and Perry's Blue are used.) In front of the iris, and in irregular groups between is the scarlet Darwin tulip, Farnecomb Sanders, dazzling against its green background. A mass of *Iris Florentina alba* in the center of the back row, and exquisite crinkly Zua with its picot-edges at each end of the row of shorter iris come into bloom at the same time, and their cool gray-whites make the great tulip cups fairly blaze. The curved edges of this bed are outlined by Sutton's Mammoth white violas.

The background of green from the lilac hedge does wonders for one's favorite groupings of creamy plicatas accented by velvety reds, for yellow selfs with attendant red and yellow bicolors, for the pinks, and for pure whites between red and white bicolors. In short, the bed with the green background shows off reds and whites to best advantage. Before the late iris has finished blooming, white thalietrum thrusts its graceful foliage and feathery heads into view. By July first "Old Faithful" shoulders the

burden of bloom, and ushers in the stately procession of tall, tawny lilies. "Old Faithful?" Yes, the white phlox, Mrs. Jenkins, too dependable to be interesting, even the beetles don't bite it—but if one gives it the faint encouragement of cutting off dead flower heads, it blooms and blooms, and knows not how to stop. In one word, anyone who slips six sets of Mrs. Jenkins among the tall iris in a bed is safe for the summer.

The high board fence was a problem—so hot, so high, so hideous. But, painted white it reflected the light and did delightful things to Glowing Embers, Mrs. Valerie West, King Tut, and other dusky beauties. But I am getting ahead of my story. Cheap, fan-shaped trellises were bought in a department store basement. These, too, were painted white and set three inches out from the fence. This three-inch space provides for a circulation of air back of the vines and prevents the scorching of the tender shoots which results when they are fastened flat upon a superheated fence. On the center trellis is the golden *Rosa Hugonis*, flanked by two coppery "Jacotte" roses. Blue and purple clematis cover the two end trellises. The roses used bloom with the last of the iris while the great purple or blue stars of the clematis, guarded by clumps of frilly double Newport Pink hollyhocks make even a hardened gardener gasp. And making other gardeners gasp is—we'll confess—a consummation devoutly to be worked for!

After the hollyhocks, and also planted against the high fence, are groups of hardy asters—the pink "Queen Mary," with its foil, blue "Climax." Later still comes the five foot "*Aster Grandiflorus*," a pale lavender which blooms at the same time as the great golden single chrysanthemum "Gretchen Piper." Find a lovelier combination if you can! When October frosts are due, the ugly board fence turns from foe to friend overnight and in its shelter, aided and abetted by a burlap curtain and a few beanpoles, even the most temperamental chrysanthemums can be successfully grown. Yes, I *do* mean anemones and Japanese. The curtain of burlap bags is tacked to the top of the fence, and by day drops out of sight behind the chrysanthemums, and by night is stretched over their heads to the waiting beanpoles in front, whence it falls to the ground, tent fashion.

In front of the chrysanthemums, well in front of them, come our iris. Here the stateliest beauties thrive, shielded from the wicked winds of May. Framed between tall pillars of *Iris sibirica*

("Emperor" and "Perry's Blue" are both good) these beds with their white background are for your groups of delicate pinks or blues, or Midgard with Indian Chief or Coppersmith, and here the deep, dark velvety iris are at their exquisite best. At their feet, and gone before they bloom, is a broad blue ribbon of *Phlox divaricata*, caught here and there with *Alyssum argenteum* and backed by the big cup-shaped early golden tulip, Rising Sun. The curved border here is of Sutton's Apricot viola, Sutton's Mammoth yellow, and the lovely fragrant blue bicolor "Maggie Mott". If well watered, these violas bloom from April to frost. If you cut back only one-third of them at a time, you will have some in full bloom, some starting to bloom, the rest about to start.

Put late tulips with your iris wherever it is humanly possible. Your reward will be in beds that rival Joseph's coat during the waiting time between daffodils and iris. Besides, the combination works magic for both; the tulips' lovely curves bring out the sword-like slenderness of the iris sheaths. Picture for yourself a double row of La Tulipe Noire, inky black with blue gleams, silhouetted against the white fence and brightened occasionally by groups of Afterglow. Tulips are tucked into every available niche between the iris—Valentia's deep purple, the incomparable rosy apricot of Ambrosia, and all the Inglescombe Yellow your purse will run to. For it is the latter which supplies the warm yellows missing from the early Pogoniris. When "Amber" takes over, Inglescombe Yellow, its duty done, relaxes, and overnight flaunts feathered edges and gay splashes of a sophisticated lipstick red.

Against the fence's white background a pink phlox is used. "Thor" is effective after it is once acclimated but may have to be humored a bit for the first year. With it blue platycodons give their continuous performance; and *Salvia farinacea*, its end shoots pinched back, and back, and back again, becomes a mass of bloom and straggles no more. The soft pink of oriental poppy, Mrs. Perry, will enhance the delicate blue of any iris. Its root keeps straight on down, and does not poach on our iris preserves.

The sheltered bed by the picket fence at the far end is for adventures in iris. Here are grown those which require a little attention and are therefore the more interesting. W. R. Dykes, with the gigantic Nene; Purissima and William Mohr, and that galaxy of French beauties, Mme. Cecile Bouscant, Souv. de Loeti-

tia Michaud, Micheline Charraire, and Suzanne Autissier. All of these are protected from the rigor of winters along the Delaware by old window sashes laid on boards sufficiently slanting to prevent snow or ice remaining on the glass.

Jersey soil seems to suit W. R. Dykes. No iris I have seen can compare with it; in full sun, or in the kinder light of early morning, or late afternoon its beauty fairly takes one's breath. There was not a vestige of purple on any of the five perfect blooms it produced this, its first, year. For purposes of comparison Pluie d'Or was planted less than four feet away so that one could stand and look at both. It suffered so from the contrast that it will be moved. The strong straight stem of W. R. Dykes held its own through our hurricane this May, which bent and twisted the weaker stalks of Pluie d'Or, and wrecked many another fine iris.

At the back of this bed are chrysanthemums, the early varieties which bloom before frost, Aladdin with Linda, Rosa Ricci (the exquisite rose single with its triple rows of long, fine petals which has put buxom Mrs. Buckingham's nose out of joint) is partnered with Marie du Pont, our finest early white, and Mrs. Francis Bergen, the lovely semi-double white with apple-blossom pink at its heart. These chrysanthemums, and the pink and the blue hardy asters are pulled forward to come into the picture after the lilies finish blooming. And how those lilies bloom! The Regal lilies especially revel in the proximity of the iris, and occasionally try creeping under a rhizome. Disbudded to four, the individual Regal blooms are enormous; if left alone there will be sixteen to eighteen on a stalk. The speciosums, pink, white, and Melpomene as well as the yellow *Henryi* also appreciate being shaded at their roots.

Would you like a thrill? Plant blue *Phlox divaricata* in a broad band backed by the early tulip *Le Rêve* (synonyms *Hobema*, *Sarah Bernhardt*). *Le Rêve*'s exquisite cups of soft pink have lavender gleams which bring out the lavender tones of the blue phlox. By iris time the tulips are gone, and the phlox is merely a low green carpet which admits all the sun the most exacting iris could demand. The edging for the bed is also of violas, pale blue *Maggie Mott*, dark velvety blue *Alpinis*, and *Sutton's Apricot*. Tulips of delicate hues are tucked in every tiny niche, also a few pink oriental poppies, and, just in case the schedule should go wrong, the ever reliable Mrs. Jenkins is

used to bloom away the summer through. But though a paragon, she has one fault, which is, she does not always know her place and after the first summer must be watched lest she become forward and try to push in among her betters.

There are no expensive novelties in this modest garden, and no trained helper. But within its limited space some interesting iris are grown, while the plants chosen for succession of bloom are those which enhance the beauty of one's iris, which do not become unsightly, and most important of all, do not trespass nor crowd one's iris. They are also of the easiest culture.

New Jersey.

FRANKLIN B. MEAD

■ The directors of the American Iris Society place here upon record their sense of the great loss the Society has suffered in the death of Franklin B. Mead.

As a charter member and a director of the Society over a long term of years, Mr. Mead exerted a splendid executive capacity that assisted in the advancement of the organization. As a fastidious judge, he helped maintain those high standards which have brought the Iris to the supreme rank it enjoys among the flowers cultivated in American gardens and gardens abroad.

Mr. Mead was an amateur horticulturist whose interest extended to many fields of the green growing world. He labored to hybridize and produce new varieties, which grace many gardens today. He coordinated the efforts of gardeners in flower exhibitions and by his own garden set an example to his community.

A man of wide reading and diverse interests, he brought to his hobbies an understanding mind filled with inspiring vision. With these interests he was generous to all those who found pleasure in like interests, and his capacity for friendship was deeply moving and widely felt.

We shall miss his wisdom in our Board meetings, his ability as a judge, his enthusiasm as a hybridizer and exhibitor and his friendly presence at all our gatherings.

We extend our profound sympathy to his family and direct that a copy of this statement be sent to them and that it be spread upon the minutes of this meeting.

SUCCESS WITH IRIS

RACHEL FOX

■ When I was asked a few months ago to write an article on "Success with Iris," I hesitated for I do not specialize in iris, but am passionately fond of all flowers. Some years ago, however, I had a fine collection of iris and from them I have had some pleasing surprises for I do not believe anyone has raised seedlings the way I have. On the side of a hill we had a young grove of pines. This is separated from the lawn by a row of iris, many of these from the garden of the late Bertrand H. Farr at Wyomissing, and to my delight every iris season brings me new joys for nestled beside pine trees beautiful iris have sprung up which no one but nature has put there, and I would not disturb them for anything in the world. I have twenty bee hives near this row of iris and I know it was from these busy little fellows, the birds and the gentle winds that I have had these results. I cannot say that there is anything unusual among my seedlings but I love them nevertheless, probably, because they were like Topsy, they just grew. The Siberian iris scatters its seeds most easily so I have many unexpected clumps of them.

It is most interesting to find out from one's enthusiastic iris friends with what success they have met, both growing iris and also raising them from seed. So I have asked some of my friends to give me their experience.

Within a radius of fifty miles of Harrisburg will be found beautiful iris gardens. Of course the most noted one is the iris garden of the late Bertrand H. Farr. Many of the beautiful old varieties are still on the market and in great demand. I heard Mr. Farr ask Mrs. M. A. Cumbler, who originated the wonderfully beautiful "Mary Barnett," how it all happened and her reply was "If it had not been for your beautiful iris in my garden, Mr. Farr, I would not have had it."

One very busy man living a few miles away finds great fun in the game of raising iris from seed and I want to quote him in full. "I started this with the idea of the novelty and also to obtain a variety of colors and combinations without the necessity

of purchasing iris, and the results have been very gratifying. In crossing, I use a small camel's hair brush, but I do not dip it in alcohol after each operation, simply draw it through my fingers. Any stray pollen on the brush amounts to little. Also I do not always tie up the blossoms, as I believe that the bees might make a better cross than I.

"Not being in the game in a commercial sense, I can be rather indulgent in this way. I have several beautiful iris from Dejazet, which are much larger and finer than the parents. From Mary Garden \times Mad. Chobaut, I have some very attractive plicatas in various colors and patterns. Alcazar seedlings were very large, most of them floppy, but crossed with Gaudichau, I obtained some beautiful dark iris. Seedlings from Flammenschwert were practically worthless. Seedlings with Caprice blood retained a great deal of that fragrance, and from it I obtained two very nice rosy pink iris. In all my crosses with stock of this type, including Isolene, Princess Beatrice, Harmony, Rhein Nixe, etc., I obtained a greater variation of color and type than I expected, and fulfilled my desire to have a collection of iris that was fairly good and attractive for my garden at no cost. Unfortunately, due to the drought, seeds planted in the fall of 1931 did not appear until this spring, but as I have bought some better iris, such as Majestic, Bruno, Snow White, etc., I have hopes that next June will show me a still better collection of iris. Of course my procedure is not the orthodox one for the scientific breeder of iris, and my sole reason was the increase of my varieties, aside from the novelty of growing from seed, but were I to spend more time and had the space to grow them, I would probably follow out definite lines of breeding. The steps I take are just continuations of the work where the originator left off; I take his variety and possibly make the same crosses that he would have made and, for my purpose, the results are most gratifying to me. The only serious trouble in the game seems to be the tendency of visitors to my garden to pick off unbagged seed pods.

"I would suggest that if anyone wants to enjoy a real thrill of creating something, they should try iris breeding; one very good seedling will repay them for all the trouble of raising a quantity; and there will be plenty of mediocre ones that will be so attractive to them that they will want to keep many of them."

Two sisters having one of the best iris gardens around here

write me: "Our earliest iris was *reticulata*, so charming—but alas the German Iris grew so large that it was covered by it, and although rescued and transplanted, went out. *Iris persica*, a delightful little iris, bloomed once or twice and it, too, disappeared, owing, perhaps, to lack of winter protection. *Iris cristata*, the wild iris of North Carolina, is a beautiful, dainty species. We have tried the Spanish and Dutch Irises—but not very successfully. Perhaps they, too, need winter protection. The dwarf iris under various names, and of delightful coloring, add much to the joy of my garden. The Intermediates have a most interesting place in the garden continuing the color after tulips. Then comes the great glory of the Bearded Iris in its many and beautiful varieties. This iris flourishes in our shale soil at the farm. While the Siberian Iris is very different, it adds its share of the garden joy. The beautiful Japanese Iris was not happy with us owing to the lack of water. *I. ochroleuca* with us is a shy bloomer, taking a long time to become established and the drought of last summer was hard on it. The Palestinian Iris said to have been hybridized in Holland has only bloomed once for us and while most interesting is not really beautiful. Our latest Iris to bloom is the Chinese Vesper Iris, *I. dichotoma*, the color a delicate orchid and while it blooms about two o'clock in the afternoon and lasts but a day it is lovely."

And last but not least, comes an interesting paper from Mrs. M. W. Jacobs, who was the originator of "Rachel Fox," and at the time it was put on the market by the Movilla Gardens it was considered a beautiful iris, since that time Ochracea has taken its place. They are similar, Ochracea being taller. Mrs. Jacobs' paper is as follows and she has entitled it "An Iris Retrospect."

"Present-day Iris collectors perhaps do not fully appreciate their blessings. Twenty-five years ago, one did not have, as today, innumerable iris catalogues, sent out by many growers, from which to make—at various prices—a collection of varieties, nor did one have the invaluable help rendered by the A. I. S. in trying to list each variety under only one name, and to give ratings by which to judge of excellence. My earliest acquisitions—except a few from friends—were made slowly, and largely from the country people who brought their produce to market, augmented by the flowers that the women raised in their gardens. I always watched for the iris blooms, and, if any were different from those

that I already had collected, I would engage a root, which was gladly sold and brought to me the following market day. In this way, over a period of several years, I collected about twenty varieties, and was fascinated by their varied beauty.

“Then I heard of the work of the late Bertrand H. Farr in his nursery at Wyomissing, and I at once went there and found it a veritable iris fairyland. He not only had the then best varieties of Bearded Iris, but other species as well, and was constantly adding to them both by importation and by raising seedlings—mostly from hand-hybridized seed. This introduced me to the raising of iris seedlings which is so easily done, and which adds so much to garden joy. Mr. Farr cared more for beauty of color and form than for mere size, and many of his creations are still among the best loved varieties of this beautiful flower. Every iris-lover knows that the pioneer work done by Mr. Farr laid the foundation for the importance and the popularity of the iris, and that his untiring work, largely makes possible the ease with which a good collection can now be made of this lovely, iridescent flower.”

I hope these few words about the joy of raising iris will put it into the hearts and minds of others to do likewise. It is great fun!

Pennsylvania

THE PLAINFIELD, N. J., PARK PLANTING

HARRIETTE R. HALLOWAY

■ An important contributing factor to the success of our one-year-old Iris Garden is its setting or series of settings.

The largest plantings of the Japanese varieties are located a few hundred feet away from the public drive, near the bottom of a grade which slopes down from shrubbery on their west and northwest, and in front of a slightly higher pedestrian path which is between them and their still higher background. The six beds in this section contain about four hundred and fifty plants—both named and unnamed varieties—a gorgeous mass when in bloom.

About thirty feet farther north—all grade and background conditions being the same—is a bed of Iris Species. We are hoping that this pleasing location will prove satisfactory to them.

At a bend, just across the path, right in front of the shrubbery is a very narrow forty-five foot bed filled with *pseudacorus* and Snow Queen, continuing to the next plantings.

Where this same winding path is cut at right angles, by one coming from the east over a rustic bridge, the two western corners are alcoves surrounded by the continuation of aforesaid shrubbery and trees. In the southern alcove is a large bed with sixty varieties of named Japanese Iris; and in the northern—on a sharp grade with perfect exposure—is a long bed containing nearly fifty varieties of Early and Fall-blooming Iris, and in its shadier corner, more *I. pseudacorus* and *orientalis*.

This transverse path now slowly climbs the grade to where, behind shrubbery, again lies open and higher ground and just west of the alcove-beds, on the south side of this path, is a huge bed, fifty feet long and beautifully shaped, filled with a hundred and fifty plants of named varieties of Siberian Iris.

Northward from the Siberians, on each side of an open-center plateau nearly six hundred feet long and varying between eighty and two hundred feet wide, the great bulk of the Bearded Irises of all heights and seasons—three hundred varieties—are growing vigorously. Here again grades are used—up from the south and up from the east—although the major part is on level ground. The setting is ideal. Shrubbery (except at important openings) and trees—three separate clusters of locusts, a few young oaks on the west, and a few large old trees at extreme northwest—make the afternoon shade exactly right, and in addition to supplying a beautiful background for the iris bloom, also spread rich autumnal foliage around the solid green of the iris plants.

A second important factor is the shape and placing of the different beds, nearly forty in all, which were designed by a member of the Olmsted firm. They are not—as so often seen—solid blocks on rectangles of soil: they are curved, gracefully long and winding, or dovetailed (with narrow grass paths) like sections of a picture puzzle—one alone here, two or three together there, following shrubbery in one place, curving east to a clump of locusts in another, sometimes wide, sometimes narrow, long (one eighty feet) or short, but never a right angle and rarely any angle.

Because of the exceptional settings and because of the outlines of the beds with their healthy plants, the Garden is an attractive and interesting place at all seasons.

The third important factor—the color scheme—has been only partly demonstrated as yet. There has been no attempt to develop it among the Japanese and the Siberian—that effort is in the distance—but the chairman had and has, definite planting plans for the Bearded, based on carrying quality and on harmony of color.

Looking northward, on the right the *plicatas*, with their prevailing near-whiteness, are placed directly in front of shrubbery, and, half-way the length of the garden, are the *amoenas* similarly placed. On the left the colors rise, with the grade, from white and cream through tones of pink into reds, and in a separate bed, very dark purple. The succeeding bed of lavender bicolors is balanced on the right by lavender selfs. Next come the blends, five beds, two on right, three on left, standing out in strong clear light. At the highest level two large beds of yellows, *variegatas* at extreme ends and at back, and selfs in center and front—command the whole. Over forty feet across the grass, dark blues in a wide band shade down through two-tones, light blues, creams, and whites, and fairly rush down the sharp grade to the east through an opening in the shrubbery. Returning in a wide curve to the north the colors again rise through white, cream, and shades of pink to red—first one long bed, and then three good-sized ones. This completes the north end, at the west corner of which, in a strong light, is the large bed of *Pogonoclytus Iris*.

The large Japanese plantings, the beds by the rustic foot-bridge, and these masses of yellow, blue, and white, at the opening in the shrubbery, attract the eye and arouse the interest of the pedestrian and of the motorist—over three hundred feet away. Even with the naturally sparse bloom of a first year this color scheme—and indeed the whole garden—gave promise of success and great beauty.

New Jersey.

SIBERIAN IRISES FROM SUNNYBROOK

ELLA PORTER MCKINNEY

■ Comprehensive iris lists from American growers show the influence of Mrs. Frances E. Cleveland's selective work among the Siberian irises. A list before me, out of the forty-one items apportioned among nine breeders and selectors, gives Mrs. Cleveland seventeen—over 40 per cent of the list! These range from her first introductions, Butterfly and Sunnybrook in 1920, to Little Boy Blue and Mountain Pool in 1932.

Among her seedlings are the many flowered Siberian types as well as the two or three and four flowered *orientalis* type, sometimes with very tall stems and large flowers. The general excellence of all these is due, without doubt, to the fact that to begin with she had the better types like Emperor and Perry's Blue. When I visited her garden in early June of this year she told me that selection from seedlings from seed-pods on good parents had been *her* work, the rest that of nature.

Mrs. Cleveland loves blue which may or may not account for her early concentration on a branch of the iris family that expresses itself chiefly in blue and white at blossoming time. Among her seedlings the predilection for blue is seen in the names chosen—Blue Heron, Blue Flame, Blue Owl, Blue Ridge, Blue Star, Blue Wings, Little Boy Blue, Turquoise Cup, Periwinkle.

Butterfly and Sunnybrook are in many of our gardens. Not so many gardens know well some fine later introductions. Blue Wings, two and a half feet, is an exquisite clear light blue of *orientalis* type. Periwinkle carries as many as six flowers to a three-foot stem and is of the bluest with great substance and broad foliage. Little Boy Blue—a velvety blue shading to darker at the edges is one of Mrs. Cleveland's favorites as is Turquoise Cup, an enthusiasm that visitors to her garden share.

Averse to naming irises for people but wishing to honor her many friends of Llewellyn Park, West Orange, N. J., she has given the name, Llewellyn, to a blue self that carries itself on thin almost sinuous stems. This characteristic gives it delightful possibilities in arrangements for the house.

White Dove and White Empress are two whites of diverse form and tall. These sometimes produce a third and even a fourth flower and there is a still unnamed white which is very frilly in all its parts.

Morning Magic (1932) is a very early pinkish lavender with six or seven flowers to a stalk coming into bloom in mid-May. This earliness makes it valuable as well as the habit of sending up stalks of bloom at the end of the iris season, as reported from gardens.

Eatontown lies low and quiet in the June sun. Sunnybrook is a level, sandy farm and the wide old farmhouse is reached by a lane through wood and field. Mrs. Cleveland is a gracious hostess who takes pride in pointing out this and that rare plant which has found a place in her garden. Her taste for beauty being a catholic one, she adds to her gardening enthusiasms one for silky haired dogs of fine breed, and another for old furniture and glass from early homes of New Jersey.

That so many Siberian irises have originated from a garden of the sandiest soil is an interesting horticultural observation. Given plenty of moisture and humus in the soil they grow satisfactorily for Mrs. Cleveland. They are, also, on entirely level ground. Her success would certainly not be so good on a sandy hillside.

New Jersey.

JAPANESE IRISES FROM LITTLE SILVER

ELLA PORTER MCKINNEY

■ Little Silver is not so far from Eatontown as the crow flies or as the motor car whizzes. *Iris kaempferi* is the only type of the family that has attracted the breeding experiments of J. A. Kemp of Little Silver. Mr. Kemp likes big dahlias and big zinnias and has gorgeous specimens of both in his small acreage of superbly clean tilth.

The late June sun was hot on the day that Miss Averett and I motored down to see the irises in bloom. But Mr. Kemp, who was to have his seventy-first birthday in July, apparently gave it not

a thought. His ancient leghorn hat had sheltered him from many June suns and in comfortable shirt-sleeves he piloted us about his interesting small place. There is a son and a son-in-law temporarily without jobs who are now assisting and so Mr. Kemp calls it a day with his mid-afternoon walk to the village for his daily paper.

Three or four years of his life were spent with Dr. Van Fleet at Washington and he was offered a permanent place there, but Little Silver pulled him with its peace and its friendliness. Some ten or twelve years ago he was impelled to try his hand at pollenizing *Iris kaempferi* for clear colors—a little dispirited at so many rings and stripes and mottles. Out of about a thousand seedlings he selected twenty-three, selling the residue to J. T. Lovett, whom he also allowed to have from time to time this and that variety. One, lost in the shuffle of a nursery, Mr. Kemp regrets wistfully, for it was a beautiful blue of fine carrying quality.

Later Mrs. Cleveland came and selected from his seedlings sundry clumps the value of which they attempted to estimate in the field. This seemed to him too big a task and he asked her to bring him the estimate after she had torn them apart for transplanting. She came back with her report and a check for \$125.00. This check made him feel a millionaire for he had just been playing with these irises with a good time by and large. He points with reminiscent chuckle to the big tree under the shade of which he and Mrs. Cleveland sat to go over the account. Then there came a sizable order for a landscape effect on a big estate, and so Mr. Kemp was launched into Japanese Iris growing. There are rows and rows of healthy plants from last year's division. He says bugs do not find the cleanliness of his culture to their liking so he is not troubled to any extent. There were no signs of the borer. He uses peat moss to help keep the soil from too much alkalinity.

They were in good bloom on June 28th, the day of our visit. With varied heights and colors and forms those appealing most to us were Selkirk, Celestine, Daydream, Charlotte and Oceana. Selkirk is a 42-inch six-petalled big white with so much lemon yellow on the reverse of the petals that as these close the effect in the clump or along the row is so creamily yellow that one thinks, "Here is an almost pale yellow," but it is only the back of fading petals that produces the illusion. Mr. Kemp and many of his

visitors think this superior to Gold Bound. Certainly it is a vigorous handsome iris.

Celestine seemed to me the regal beauty of the lot. Huge three-petalled lavender blooms with darker styloid petals—four of them on stems that reach fifty inches in good culture—made a startlingly lovely effect. Daydream, a large single pinkish lavender with almost blue buds and not so tall—30 to 36 inches—made a striking mass. Charlotte is a white so finely dotted with rose that the effect in the garden is that of a rose colored iris, and Oceana is a tall deep purple six-petalled flower so intent on the work of doubling, provision for seed bearing is disregarded entirely.

Mr. Kemp divides either in September or April and there was good bloom on April divided plants.

He allows no seeds to fall which is an absolutely necessary precaution against mixed up rows in Japanese and in Siberian irises. I recall in my early days of iris collecting, I ordered from an old and really excellent nursery, a nursery that did not specialize in iris let it be said, 50 purple and 50 white, both named, I recall. In the entire hundred there was not one single blue purple answering the description and of whites there were only two double, both different and several single whites all different in form. Most of the hundred had to go to the dump heap and I had my lesson in the value of keeping seed pods plucked off promptly.

Mr. Kemp lists 21 varieties of Japanese iris and he also sells seeds to anyone who would like to try their hand. He takes an especial pride in a large shipment from his gardens reaching New Zealand in fine shape. There are many interesting things about his place.

A rose which he calls Junior Van Fleet—a cross between Frau Karl Druschki and Dr. Van Fleet—has the deepest glossiest holly-like foliage. There is a blight resistant chestnut which Prof. Hanson of North Dakota brought from Siberia. There is a dahlia storage underground house, with the shipping room above, that is so much the just right thing in moisture and ventilation, that the dahlia clumps need only “just putting there.” A window stays open all winter except in the severest weather. Mr. Kemp is justly proud of this and the arrangement which the son-in-law rigged up from old automobile parts that would shut the electric light off with the closing of the trap door to this storage. A happy life among plants Mr. Kemp has had!

GARDEN NOTES ON SOME BULBOUS IRIS

B. Y. MORRISON

■ In spite of the fact that the notes that follow touch upon relatively few varieties, they are given in the hope that more persons will undertake the growth of this charming group of iris which come into flower at a time when other iris are not at their best. I was led to this somewhat limited study by the amazing persistence of some odds and ends of Dutch Iris that have maintained themselves for years on a bit of sunbaked and gravelly slope really dedicated to wild tulips and California brodiaeas, and purchased from one of our Western growers a small set of varieties with the result that this spring saw gay groups all along the border that faces that same bank, and a growing resolve to see if there are other sorts that will break up the rather narrow range of color that I now have.

Of the sorts purchased, only one is really yellow, pure and unadulterated, none is truly white, although there are white varieties, yet Theresa Schwartz is almost as cool and clear as any tinted white. The remainder fall into two general groups, the one more or less pale yellow with blue to violet-tinted standards and the other, blue lavender, with deeper blue to violet-tinted standards. One might be sententious about so many named varieties for such similar flowers if it were not for the fact that the near-duplicates often follow one another in their flowering times and that the size and shape of the yellow signal blotch on all the falls makes a great difference in the general effect.

To give the mere sequence of flower this year, the procession began with Theo. Wyck, with Hobbema, David Teniers, Albert Cuyp, Theresa Schwartz, Yellow Queen and Rembrandt following closely enough to be counted in one general scheme, then a week later, the first full bloom on Hart Nibrig and E. B. Garnier and the first solitary flower in Imperator but no flowers at all as yet on the iris of this general type that came to me from Kentucky where it is curiously known as the Duckbill iris.

Forgetting the sequence and coming to color notes, it is easier to group the blues and the pale yellows and as these paler flow-



Michael Carron

DUTCH IRIS, HOBBEEMA



Michael Carron

DUTCH IRIS, DAVID TENIERS

ers make their bow first, we begin with them. The effect of the signal blotch has already been mentioned but note should also be made of the tinting of the standards and the style branches which are rarely uniform in color, and as these iris flowers open widely, this tinting contributes to the general color effect. The standards in particular are usually tinted at their bases, darkening until the color is often identical with that of the style branches, giving a deep coloring in the heart of the flower.

Hobbema, the first of the lighter flowers to open here, has standards that are close to the Lavender Gray of Ridgway with but little darkening at their base, and falls that are essentially Sulphur Yellow, infinitesimally deeper toward the margins and marked with a wide blotch of Light Cadmium that deepens to Cadmium Orange in the center. In my soil, sixteen inches was the usual height and there is almost as little variation in height among these flowers as there is among Darwin tulips, if you are fussy about such things.

David Teniers, which comes almost at once, is a bit more blue in effect, the Ridgway readings being, Pallid Blue Violet shaded toward base to match the Light Violet style branches. The falls, again a tinted yellow, have the unhappy designation of Olive Buff, but do not be fooled by this for it is a good color accented by a rounded blotch of Light Cadmium. In the bargain, Teniers usually gives you two more inches of stem than Hobbema.

Albert Cuyp boasts standards of Pale Verbena Violet, a name more alluring to the ear than the color is to the eye, with falls of Primrose Yellow, again set off with a large Cadmium Yellow blotch. Sixteen inches for Cuyp.

Yellow Queen tops them all for height with a good thirty inches and is distinct among them all for the shape of the flowers which are dwarfed by the shorter standards. These are Lemon Yellow, the falls Lemon Chrome with an indistinctly defined blotch of Cadmium Orange, a close sequence of yellows that give a brilliant effect.

Theo. Wyck was the first of the whole collection to flower, one of the loveliest and unhappily unhealthy for most of the plants appeared to be touched with mosaic, with the result that all are now banished. The general effect is that of a self, Light Blue Violet of Ridgway, with the bases of the standards and the style branches shaded toward Spectrum Violet. There is enough of blue



Michael Carron

DUTCH IRIS, THEO. WYCK

in this coloring to be accentuated by the Light Cadmium blotches. Whether the fourteen to sixteen inches shown, constitutes the proper height, I cannot say as I suspect healthier bulbs might have given more height.

Rembrandt was of stouter stuff and a good eighteen inches, with standards of Spectrum Violet and falls of Light Blue Violet that seem darker because of the tracery of veins that cover the falls outside the large Cadmium Orange blotch.

Theresa Schwartz made two full feet but as it had a bit more shade from nearby dogwoods, it may have been drawn a little. As one came down the path she stood out against the dark green of heaths, singularly clear and white although the color is far from that. The standards are Plumbago Blue toned slightly toward Pale Wistaria Blue, and the falls are faintest Olive Buff over white scarcely touched by the narrow blotch of Light Cadmium.

As this spring was cool, these varieties were still carrying some flowers when Hart Nibrig, E. B. Garnier and Imperator filled out the little group.

Hart Nibrig has standards of Wistaria Violet toned toward Bradley's Violet at their bases to match the style branches and falls that lie between Pallid Soft Blue Violet and the pale Forget-me-not Blue of the chart. As the blotch is narrow, it counts for little. Sixteen inches.

E. B. Garnier is darker in effect, with standards of Bradley's Violet toned toward Dauphin Violet and falls of Light Wistaria Violet that seem darker because of the pattern of veins over them, thin hair lines that are almost Wistaria Violet if one dare trust his eye to judge so fine a line. The blotch is narrow and not conspicuous although of the usual Light Cadmium. Eighteen inches.

Imperator has standards of the same color as E. B. Garnier and falls of Ontario Violet faintly veined with Soft Blue Violet and a narrow blotch of Cadmium. Eighteen inches.

Although I usually trust my nose, now that these notes are old, I wonder a little if I am correct that I found a faint scent in the variety, Rembrandt?

Since I am the sort of gardener who grows plants chiefly to see what they look like and how they behave in the spots I imagine will suit them best, my plants have not been grown for effect but my notes show that here, near Washington, D. C., *Lonicera*

Korolkowii was a shower of pink and *Cytisus praecox* was just losing its ivory-white flowers. *Kolkowitzia* was beginning to cover its arching shoots with pinky-white trumpets and the Scotch brooms were covering their green wands with yellow to wallflower red blossoms. In the rock garden are found the veronicas, *rupestris*, *teucrium*, in its several forms, the beginnings of *incana*, the later early phloxes particularly *ovata* and the true *amoena*, armerias, *Dianthus arvernense*, the first bloom of *D. granaticus*, *Silene pennsylvanica*, long-spurred columbines galore, and the earlier pentstemons, *euglauca*, *fruticosa*, *ovatus*, *deustus*, and *hirsutus* were under way with the Ghent azaleas in full glory and a few seedling *calendulaceas* so early that one suspects a tainted past, early *hemerocallis*, and the uncompromising colors of *Lychnis viscaria splendens*, surely enough of a list to be of use to those who garden more carefully than I, and offering various combinations with the iris that are essentially violet blues and soft yellows for all the imposing nomenclature of Ridgway.

D. C.

GARDEN PICTURES 9

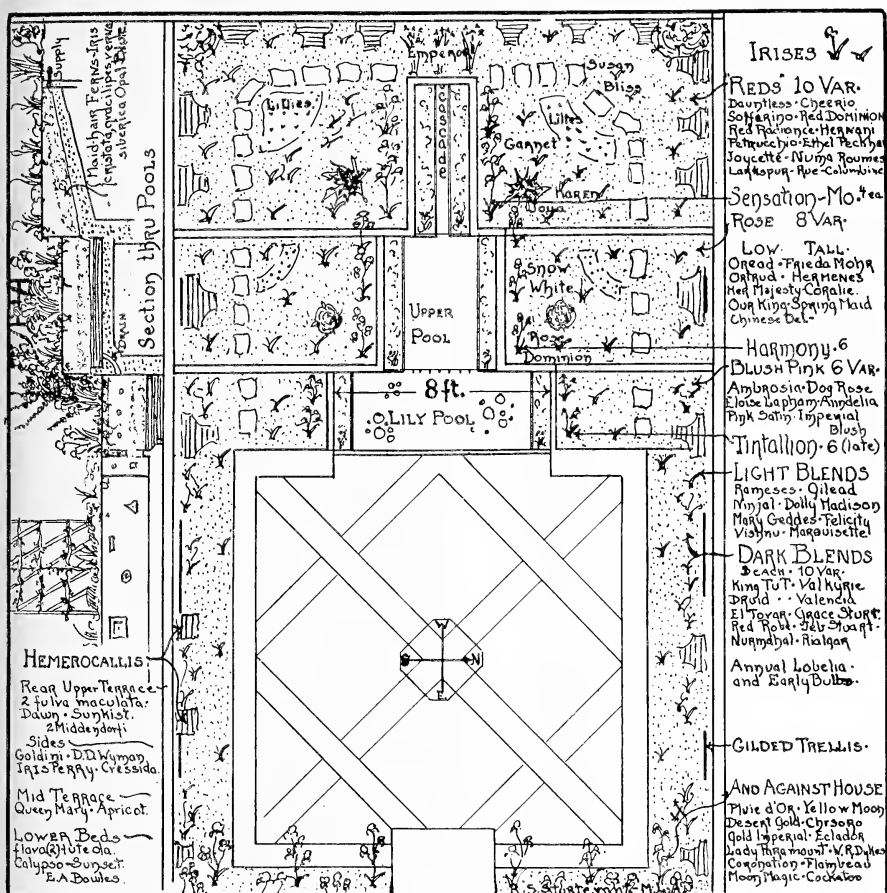
"Modern"—?

R. S. STURTEVANT, M.L.A.

■ There is such a dearth of suggestions from my readers that I shall assume that I have been greatly influenced by my visit to The Century of Progress—an exposition of modern industrial progress but not of a new horticulture. Its architecture is based on the development of new materials even more than on new uses of old materials. Its magnificent use of applied colors answers theoretical considerations and has yet to prove suited for everyday living. We humans tend to change our environments but slowly and nature is even less willing to be adjusted so that a "modern" garden must be largely architectonic, its plants sheered or bedded in a quite Mid-Victorian manner. Otherwise you may seek a compromise and combine natural growths against colorful walls and happen upon geometric accessories. As cost must be considered our gardens will but faintly reflect the modern trend except in restricted areas. A "Sky" garden is so restricted but also there is many a small terraced site or city yard where we may go as modern as we will.

My problem assumes that the area is small, that much of it must be available for use as an out-of-door living room, and that the approach and usual view-point is at one end of the short rectangle. Hence the solution should present one pleasing picture, its foreground the open area upon which we may distribute colorful furniture, its middle ground varied in form and color but not distracting our attention from the trickling stream which forms the center of interest to eye or ear and lastly the enclosure, its height adjusted to our usual stand or seat as circumstances suggest.

For floor I would make a simple diagonal pattern—try ribbons of greenish slate on a turf of gray grass (*Festuca glauca*) or of dark bricks set in cement, its pebble finish tinted a dull bluish green. A wide sixteen-inch (a pleasant sitting height) curb retaining the plantings to either side and repeated at the lower pool would be tinted palest salmon—the complimentary of the bluish



green of the pavement. The walls of the raised beds to either side of the step pools would be colored, the first and lowest a warm amber, the second apricot, and the third a fairly deep orange while the pool linings would pass from Nile green to turquoise and deepest gentian blue in the narrow canyon of the highest cascade. My enclosing walls would be of a slightly greenish powder blue with trim gilded trellises near at hand and rampant trumpet vines and nasturtiums toward the further end. Except that the colors deepen on the receding terraces the color scheme makes use of but two complimentary hues, the cool greenish blues in quantity, the warm red-oranges in smaller, more

broken areas. There might well be other touches of inset tile, of pot, or painted chair.

In the planting each receding terrace requires added height and the selection of a greenish blue setting precludes the use of our purplish blue irises though an occasional very dark and the rose-tinted varieties are admissible. Against the house would be choice yellows; to either side warm creams and misty blends like Ningal melting into blended pinks like Rameses or Felicity with an occasional King Tut-like dark variety. On the terraces there would be ascending and deepening blush pinks, rose, and red varieties against the wall with mere touches of deepening blues towards the cascade with its enclosing orange cliffs. And, finally, in mere ribbons next the water, would come *cristata*, *gracilipes*, and an occasional Siberian, the new dwarfish Opal Blue with its contrasting petals, all interplanted with Spleenworts and Maiden-hair ferns.

For succession we would use the truest of blues with occasionally orangy heights. For edging *Scilla sibirica* to be followed by dwarf lobelias; *Ajuga genevensis* carpeting the lower terraces would permit the occasional introduction of plants of *torrenia*; orange *Lilium Henryi* and a succession of *hemerocallis* would lean in from the enclosing walls; there would be a lot of Chinese delphinium and *Pentstemon coerulea* and occasional clusters of blue in *Lobelia syphilitica* and *Salvia patens*, this last well-worth the annual effort. Many a gray-leaved sedum and sprawls of *Euphorbia myrsinites* would give touches of winter interest at the crests of the terrace walls and I would, in my winter protection, insert carefully disposed sprays of bittersweet and branches of juniper.

A color scheme is great fun but we rarely attempt it except at a flower show.

Massachusetts.

NOTE ON IRIS PERSICA

LUCY C. BAILEY

■ A mist of uncertainty as gray as the flower itself surrounds the coming of *Iris persica* to Montgomery County, Tennessee, where its presence has been recognized and noted for the last five decades, but where it has probably existed for uncounted years. Unfortunately the identity of the pioneer gardener, who perhaps furtively and carefully tucked a few beloved bulbs into the saddle bags, crossed the mountains and forded streams, and found finally a congenial resting place for her treasures in the limestone soil, is shrouded in the past, for even the oldest garden lover can give no accurate information. Perhaps this little "blue blood" came by more modern means of transportation, but, whenever and however it came, signs point to Virginia as its original home. Yet signs often fail and I should be hard put to it to prove that conclusion. Only this can be averred with certainty, that for half a century it has lived, increased and bloomed luxuriantly in five gardens in Clarksville, Tennessee, and in at least one in Trenton, Kentucky, twenty miles to the north.

It is likely that scores of bulbs of *Iris persica* have perished from neglect in old gardens, smothered out by Bermuda grass, but as good luck would have it, a few knew a happier lot. Mrs. Herbert Leech found six bulbs in the garden of the Micajah Clark residence when she moved there thirty-odd years ago. Mr. Clark, a connoisseur of flowers and other plants, came of a Virginia family. In 1894, Mrs. Bettie Mabry found a colony growing in the garden of the home purchased from the estate of Mrs. Elizabeth Forbes, widow of Colonel Forbes, a Confederate officer originally from Richmond, Virginia. Mrs. Forbes had lived at this place from 1859 until her death in 1891. Three miles out of town, at St. Bethlehem, Mrs. John Slaughter, now well-known as the grower of *Iris persica*, got her start from her mother-in-law, formerly Miss Bowman, whose father was from Virginia, the Shenandoah Valley to be exact. Up the Cumberland River Road, tucked back among the hills, old Mrs. John Miller, of German descent, has had for years a flourishing planting, the original bulbs a gift from a garden in South Clarksville, proof that they also grew in unnamed garden plots; and in Miss Ivie Duke's old-fashioned flower beds, descendants from Mrs. Miller's stock have delighted

iris lovers for many a day. In Mrs. Malvern Crutchfield's garden at Trenton, Kentucky, a long cherished planting inherited from her mother, a Virginian, has yielded a generous blooming for many years.

I have heard of, but have not seen, other plantings of *Iris persica* in Montgomery County, plantings said to be very prolific. Further investigations would probably reveal other good sources of supply, as apparently this iris has always attracted attention and has been planted in this county and in a nearby section of Kentucky.

Insistence on scientifically correct nomenclature being a somewhat recent fashion with amateur gardeners in the South, *Iris persica* was unnamed in Clarksville but a nickname served to identify it, and tradition grew up around it. "The little gray iris" it was aptly called in the generation that called all of the bearded iris, "flags." In fact it was only a short twelve or fifteen years ago that my good friend, Mrs. Ella Porter McKinney of Madison, New Jersey, named it for us when I made a little water-color of a blossom one sunny winter afternoon and sent it to her for identification. In addition to christening it, *Iris persica*, Mrs. McKinney indicated its monetary value. Since then *Iris persica* has come into its own, both in name and fame. Mrs. McKinney was first, as I remember it, to ask for bulbs and a little school girl who enjoyed Mrs. Slaughter's friendship and had shared in the surplus from her Maltese Cross-shaped bed to the extent of bringing collar-boxes full of blossoms to school, sent a few bulbs to Mrs. McKinney, receiving in return valuable specimens of bearded iris from the well-known New Jersey garden. Since 1927, Mrs. Slaughter has reaped a golden harvest from the plot that for forty years had yielded her only esthetic delight.

Another nickname came to light when a flower lover in Virginia, whose name now eludes me, learning that my mother knew about this old-fashioned flower because she wrote, I think, a little account of it for some floral publication, wrote to buy two bulbs. The purchase was inspired by sentiment because in her mother's garden, she had known and loved this "Fair Maid of February," as she said it was called in Virginia.

The tradition that I mentioned concerns itself with the delicate odor of the blossoms. Any one admiring the exquisite blending of gray, green, lavender, orange and deep black-violet, that goes into



Michael Carron

IRIS PERSICA FROM TENNESSEE

the making of this surpassingly lovely flower is likely to be asked, "Does that smell sweet to you? Can you detect any odor?" Tradition says that an answer in the negative is proof conclusive that the subject under observation is not an aristocrat and that too sounds Virginian!

Tennessee.

IRIS PERSICA AGAIN

■ In the July issue of the BULLETIN, Mr. Wright made mention of this plant as the first to be illustrated in the famous Curtis Botanical Magazine, in 1787, but he did not mention that in the same volume in which there are thirty-six plates, there are other iris, *Iris pumila*, *Iris variegata* and *Iris versicolor*. He might well have continued to point out the importance of the iris by this enumeration, adding that it is the only genus to have four numbers the next nearest being two each of geranium, hellebore, lily and narcissus.

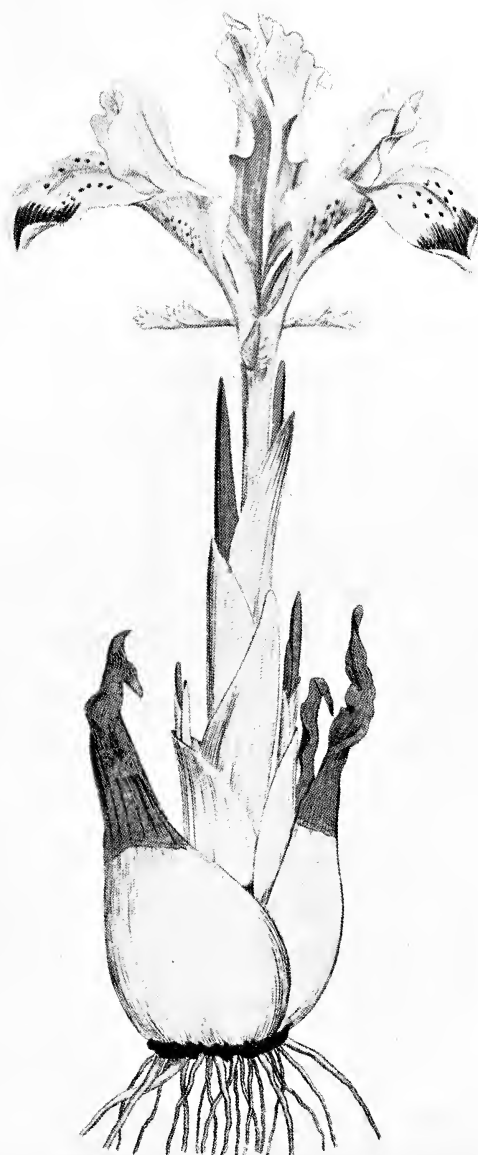
As this old magazine is not available to everyone and since the iris itself is not often seen, it occurred to me that our members might like to see a copy of the plate, even if not in the coloring of the original.

The note accompanying the plate is brief.

"A native of Persia. Flowers in February and March. Its beauty, early appearance, and fragrant blossoms, make it highly esteemed by all lovers of flowers; like the Hyacinth or Narcissus it will blow within doors in a water-glass, but stronger in a small pot of sand, or sandy loam; a few flowers will scent a whole apartment; it will also blossom in the open air, but requires warmth and shelter; it is propagated by offsets and seeds; the best flowering roots are imported from Holland, they bear forcing well; and hence this plant may be had to flower a full month or six weeks in succession."

In these times when it is so very uncommon, it would be the height of folly to try the proposed water culture. Given a warm well-drained site on a slope facing the south, it has grown in my own garden for many years, happily enough but without much sign of increase as it makes few offsets and so far as I have been able to discover has never ripened seeds. My plants have come from the Tennessee garden mentioned in the preceding article.

B. Y. M.



IRIS PERSICA FROM CURTIS BOTANICAL MAGAZINE

SCIENCE SERIES No. 12

THE REACTION OF NATIVE IRIS SOILS IN FLORIDA

H. HAROLD HUME

■ Gardeners have long known that different plants require different kinds of soil for their successful culture. In early gardening literature, particular directions are given for the preparation of soils in which plants of different kinds were to be grown. Special soil mixtures, based upon results secured in actual practice, were worked out for many species of plants. Frequent reference is made to the use and value of lime, clay, peat and leaf mold in plant culture and at the same time injury to certain plants from the addition of lime was recognized. Just how these materials changed the nature of the soil and affected the plants was not known, but as time went on certain soils came to be known as sweet soils and others as acid or sour soils and applications of lime were made to sweeten the latter kinds.

Later it was determined that certain substances affected the chemical reaction of the soil. Now, according to their reactions, soils are commonly classed as acid, neutral or alkaline, and soil scientists usually express the reaction by the pH value of the soil. This is determined chemically or electrometrically. Without going into a technical discussion of the subject, it may be stated that reactions are indicated on a standard scale, numbered from 1 to 14, and on this scale 7 is the neutral point (where the acid in the soil balances its alkalinity). Values below 7 indicate acidity and the lower they are the more acid is the soil, while readings above 7 indicate alkalinity, with the greater degree expressed by the higher figures. Hence it will be noted that 1 expresses a high degree of acidity and 14 a high degree of alkalinity. Soils in which most common plants grow, however, usually lie between 4.0 and 8.5.

The statement is commonly made in iris literature that the pogoniris group requires an alkaline soil while the apogon irises need an acid soil if they are to grow satisfactorily. Some writers,¹ however, indicate that they have grown both groups successfully in soil with a reaction at or near the neutral point. By growing Alcazar and another unknown German iris in soils of different

¹Rockwell, F. F. *Irises*. p. 52. 1928.

reactions, Gourley² found that they grew best in nearly neutral to alkaline soils with pH values from a little under 7.0 to a little over 8.0. Wherry³ has indicated a preferred soil reaction of pH 4.0 to 5.0 for *I. prismatica*³ and *I. verna*,³ of 5.0 to 6.0 for *I. carolina*,³ *I. tenax*³ and *I. Kaempferi*,³ and of 7.1 to 7.9 for *I. lacustris*.⁴ Five of these are native American species while *I. Kaempferi* is a Japanese sort. Other than what has been furnished by these two investigators, definite information on the reactions of iris soils, natural or made, appears to be lacking.

Since there is a growing interest in the native iris species because of their value as garden plants and their potential value for breeding purposes in developing a well-defined group of American irises, a comprehensive study of the reactions of the soils in which the seven, native in Florida, grow naturally was undertaken and soils from a few iris stations outside the state were included. In all, the reactions of 107 samples of iris soils from Florida and five from Louisiana were determined.⁵ Samples were secured over a period of time as opportunity offered, the material selected being taken from the root zone at the end of a growing rhizome and extending from the surface of the soil to a depth of three or four inches. The samples were placed immediately in tight containers and in most instances their reactions were determined within a few hours after being collected. Determinations were made in a one to two distilled water suspension by the quinhydrone electrometric method. The samples were numbered, the species listed, the date of collection and pH recorded, and brief notes on the soil character included.

Because soil reaction varies from time to time and is affected by conditions external to the soil, it is advisable to indicate certain factors that have tended to modify the soil reaction with particular reference to certain of these iris soils. Throughout Florida, during the period within which most of the soil samples were collected, December, 1931, to March, 1933, the weather was very dry. In consequence, although the native irises are moisture-

²Gourley, J. H. Response of Iris to Soil Reaction. Plant Physiol. 7. No. 4, pp. 739-742, figs. 82. 1932.

³Wherry, Edgar T. Soil Reaction in Relation to Horticulture. Am. Hort. Soc. Bul. 4, May 1926.

⁴Wherry, Edgar T. Divergent Soil Preferences of Related Plants. Ecology. 8: 197-206. 1927.

⁵To Dr. R. M. Barnette and Mr. H. W. Jones, Department of Chemistry and Soil, Florida Experiment Station, my thanks are due for the determination of the pH values of the various soils as well as for Table 1 and the graphs (Figs. 1 and 2).

—H. H. H.

loving plants and grow where they are often standing in water for months at a time, it was possible to walk dry shod in nearly every area where samples were obtained. For several months the formation of peat by the addition of vegetable matter from the various plants associated with iris and to some extent from iris itself had stopped. New additions to these substances had not been made and in many instances the decay of peaty material had progressed rapidly, resulting in a lessening of the quantity normally present and no doubt this had its effect in many instances on the pH value of the soil. Sometime before sampling, fires had run through some of the ponds and marshy areas. The resulting ash must have been considerable in some places, with the effect of raising the pH reading, although a rapidly moving fire with little to consume does not have great effect. In some cases, the drying up of the iris areas had resulted in the death of great numbers of snails and their shells added lime in material quantities to the soil. Roads are frequently built with lime rock and where soil samples were secured adjacent to such roads it was often quite apparent that lime had been added to them. Drainage, too, through removal of water, had in some instances had its effect in aeration of the soil and modifying its reaction. In some locations, as at Apalachicola (*I. Kimballiae*), the pH value of the soil undoubtedly had been affected by the oyster shells, everywhere abundant. The reaction of certain soils had been influenced by the presence of limestone in the lower strata or by out-croppings at no great distance and these were naturally alkaline in their reaction. A close study of the conditions surrounding those locations where samples with an alkaline reaction were secured usually indicated the reason for such reaction.

The lowest pH value found for the several species is 4.11 for *Iris savannarum* Small, near the highway 7 miles east of Wi-
mauma, though there are a number of stations for other species that are also low, as 4.79 for *Iris albispinitus* Small, along a stream 18 miles west of Wauchula on State Road No. 32, 4.66 for *Iris hexagona* Walt. near a stream 13 miles northeast of Baldwin on the road to Callahan, 4.74 for *Iris virginica* L. three and a half miles northeast of Baldwin in a pond near the road to Callahan, 5.17 for *Iris rivularis* Small in a shallow stream east of Boulogne, and 4.7 for *Iris tripetala* Walt. near a pond three miles east of Baldwin. The high values for the species are 6.41 for

Iris albispiritus Small near Carters, 8.08 for *I. Kimballiae* Small at Apalachicola, 6.01 for *I. rivularis* Small on the bank of a creek east of Boulogne, 8.13 for *I. savannarum* Small in a pond near the highway 12 miles west of Chiefland, 7.87 for *I. virginica* L., Orange Park, Florida, near road paved with lime rock, and 8.38 for *I. virginica* L., Springfield, Louisiana. The ranges and averages are given for the Florida species in Table 1. One determination for *I. fulva* Ker., New Orleans, Louisiana, showed 7.2 and one

TABLE 1

Species	Number of locations	pH values of soil	
		Range	Average
<i>Iris albispiritus</i>	3	4.79-6.41	5.24
<i>Iris hexagona</i>	9	4.66-6.69	5.42
<i>Iris Kimballiae</i>	4	6.78-8.08	7.14
<i>Iris rivularis</i>	2	5.17-6.01	5.41
<i>Iris tripetala</i>	2	4.70-4.87	4.78
<i>Iris virginica</i>	23	4.74-7.87	5.37
<i>Iris savannarum</i>	64	4.11-8.13	5.28

Fig. 1. The pH values of the soils in which the seven native Florida irises grow. Number of locations, range and average.

for *I. Thomasii* Small showed 7.7 at the same station. All reactions for Louisiana (five in number), at New Orleans, Madisonville and Springfield, show alkalinity. In humid regions where alkalinity is dependent upon the presence of lime, a pH value higher than 8.5 is not likely to be found.

In no instance was it possible to determine what effect, if any, high acidity or high alkalinity had upon the plants. Too many factors were involved and the only way in which such a determination can be made with reasonable accuracy is to grow plants of the same kind under uniform conditions in soils of known pH values. No attempt has been made to do this.

It may be pointed out, however, that the greater number of native iris colonies were growing in soils with a pH value between 5.0 and 7.0 and that particularly vigorous plants were found growing in soils at the lower acid levels. Because of the small number of soil samples tested for five species, on account of their limited range in Florida, it is possible to make comparisons for two species only: *I. virginica* and *I. savannarum*. On the basis of 23 samples for the former and 64 for the later, it is clearly indicated that the greater number of the *I. virginica* colonies were found growing in soils with a pH value between 5.0 and 6.0 while the larger proportion of *I. savannarum* plants were growing

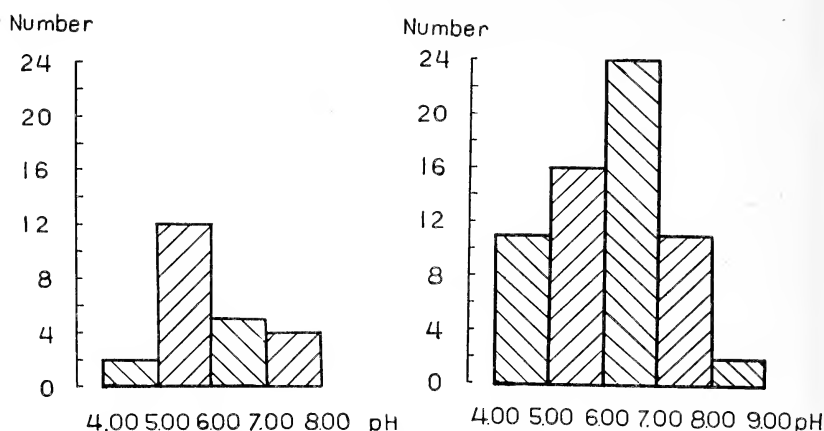


Fig. 2. Diagram showing the range of the pH values of soils in which *Iris virginica* grows in Florida based on 23 determinations.

Fig. 3. Diagram showing the range of the pH values of soils in which *Iris savannarum* grows based on 64 determinations.

in soils with a pH value between 6.0 and 7.0 (Figs. 2 and 3). Having in mind the fact that soil reaction may vary upward, it would appear advisable in preparing garden soils for Florida irises to bring the pH value down approximately to 5.0. This may be done by adding acid muck or peat or by the use of aluminum sulphate. Examination of these iris soils indicated the value of vegetable matter at all times and the necessity for water in goodly amounts particularly during the growing season. These are definitely related to good growth and free flowering. However, this fact does not detract from the value of these native irises as garden plants, for vegetable matter can be supplied in the form of acid peat, muck or leaf mold and water can be furnished in amounts sufficient to have the plants grow and bloom well under ordinary garden conditions.

VARIETAL NOTES

■ **ANGLO-SAXON** (Dannenhauer). An iridescent lavender bi-color with a conspicuous orange beard; a Souv. de Mme. Gaudichau × Lent A. Williamson seedling that I was much taken with.

DOVER (Dannenhauer). Another seedling but with Cardinal blood and the falls a deep blackish purple—the height only thirty-two inches. I would expect greater height in something other than the sand of Mays Landing.

FAIRYLEA (Hall). A white plicata, the pinkish-blue color concentrated on the style-branches and only faintly frilled on the standards; low branched and both floriferous and free-blooming; it reminded me of a splendid Lenz-schnee.

GAVROCHE (Dannenhauer). Standards of clear Chalcedony yellow and falls delicately flushed with lilac—a Mid-West seedling—not tall but charming.

GOBELIN RED (Dannenhauer). Though the originator considers it shy I found it in Mr. Wister's garden—one plant with four stalks and seven to nine buds per stalk. Like the lovely **MONTOUR** it is neither large nor tall but the color is rich—slightly more bronze than **Numa Roumestan** or **Dauntless**.

GUYASUTA (Hall). (Souv. de Mme. Gaudichau × Lent A. Williamson). Its very dark blue-violet tones emphasized by the dark haft and dull orange beard (this last a frequent derivative of the *Madame*). The plant is high-branched, the flowers well poised.

HENRY F. MITCHELL (Rosenbluth). Low and low-branched, a flower on *Yolande* lines with conspicuous cream haft.

LUMINOUS (Rosenbluth). Excellent bud and branching habit, the blueness of its pale blue-violet intensified by the redder splash below the bold orange beard; a heavier bloom but suggestive of the tone effect of *Sweet Lavender*.

NARONDA (Hall). A four-foot solid dark blue self of a fine metallic shade; placement excellent; it seems as though it would prove a much appreciated tone in the garden.

RHAPSODY IN BLUE (Rosenbluth). A pale blue bi-color a bit bluer in effect than *Ballerine*. As with the other seedlings of Mr. Rosenbluth that I saw, the poise and branching was exceptional.

ROSEMONT (Hall). A marked bi-color of rosy bronze, the brown intensified by the golden reticulations on the yellow haft. Though cupped shaped standards may be frowned upon the exposed heart is lovely and the height (3½ feet) is suitable. M. E. DOUGLAS.

THE FAMILY TREE

■ In my breeding efforts, I will frankly admit going to the extreme of actually planning odd crosses, designedly to obtain if possible new color breaks. I am also an opportunist in taking advantage of cross-breeding varieties which bloom out of season with those other which happen to be in bloom at the time, either also out of season or when they are supposed to bloom. It was in that manner I was able to breed Socrates on Mme. de Sevigne, which gave me Matuli, a later flowering dwarf bearded type.

The season of 1931 was for me a peculiarly upset one. I had dwarfs and intermediates blooming together, and some of both blooming with the later taller ones, too. I took advantage of these peculiarities of the season and succeeded in obtaining seed from the following crosses without resorting to storage methods for the pollen used. In all instances I give the seed parent first.

Soledad × Mistral	Kochi × Magnifica
Soledad × Juma	Shekinah × Fritjof
Soledad × Magnifica	Kurdistan × Geo. J. Tribolet
Soledad × Oleta	

All of which should lead to something interesting.

An eventuality of the mild winter of 1931-32 is the early showing of seedlings in my Iris seed bed of seed planted last October. About January 15 there were showing about half dozen of various crossings, and by February 15 the number was 62, with 30 more by February 22, and a total of 152 by February 27, which is not very surprising to me, because of their earliness, but also because of their sturdiness, having withstood without injury several severe cold snaps.

The following varieties have been good seed bearers only, but some of these were not tried as pollen parents.

Austin	Daphne	Kathryn Fryer
Dixmude	Dulcimer	Commandant Driant
Lent A. Williamson	Kurdistan	Prosper Laugier
Ochracea	Palceng	27 Avril
Sarabande	Suzanne Autissier	Yvonne Pelletier
True Charm	William Marshall	
Zouave	Dawn	

So far I have been able to do nothing with Queen Caterina either way.

The following have potent pollen, though some may be good seed bearers, too, and were not so used.

Amas	Tenebrae	Seminole
Homer C.	Argentina	Yeoman
(not a seed bearer)	Fritjof	Atlas
Lobelia	May Rose	Jacqueline
Natasha	(not a seed bearer)	Prospero
Rosalind	Navajo	Standard

Margery's pollen was potent on Wm. Marshall, Mela-haska and Geo. J. Tribolet.

Geo. J. Tribolet's pollen was potent on Kurdistan, Yvonne Pelletier, Mrs. Cuthbertson, Steepway, Flammenschwert and Troyon.

Shekinah's pollen was potent on Austin, Anne Bullen, Caroline E. Stringer, Odaroloc, Saona, Vigo, Steepway, Mildred Presby, Jacqueline Guillot, Flammenschwert, 27 Avril, Aphrodite, Impressario, and Dulcimer.

Mme. Cheri's pollen was potent on Margery, Dusk, Lent A. Williamson, Dulcimer, Arlington, Mela-haska, Juma, Mary. Gibson, Inez Bryan, Sweet Lavender and Jacqueline Guillot.

Chasseur's pollen was potent on Mrs. Cuthbertson, Daphne, Anne Bullen, Caroline E. Stringer, Vigo, Steepway, Ochracea, Flammenschwert and Kathryn Fryer.

Dusk's pollen was potent on Gratone, Mme. Cheri, Ochracea, Geo. J. Tribolet, Bruno, Distinctive, Flambeau, Coronation, Impressario, Troyon, Hydromel and Odaroloc.

Tenebrae's pollen was found potent on Horizon, Aurelle, Mme. Cheri, Gargantue, Impressario, Kathryn Fryer, Arlington, Juma, Mela-haska, Shaga-laska, Mallow Rose, Lilywhite, Shamoval, Cavalier, Steepway, Col. Candelot, Silver Sheen, Gretel, Mrs. H. F. Bowles, Dusk, Loreley and Flambeau.

Pollen of Souv. de Mme. Gaudichau was potent on Shaga-laska, Suzanne Autissier, Mela-haska, Arlington and Mildred Presby.

Additional two-way parents were:

Hydromel	Inez Bryan	Lone Star
Mary Garden	Mrs. H. F. Bowles	Nancy Orne
Negus	Opera	Roseto
Santa Barbara	Sophie	
Coronation	Flammenschwert	

Additional pollen parents were:

Bueno	Dalila	Dr. Chas. H. Mayo
Genghis Khan	Golden Promise	Kedeshka
Mandalay	Milky Way	Nubian
Pfaufenfeder	Sherwin Wright	Sir Michael
Somorrin	Yellow Moon	

Additional seed parents were:

Deucalion	Wild Rose	Veloute
Ecksachs	Distinctive	Zita
Quaker Lady	Flambeau	
Tristram	Sapphid	

When I use the word potent, I am referring not only to the ability to produce seed, but that the seed germinates into strong plants.

CHAS. E. F. GERSDORFF.



TO READ OR NOT TO READ

■ The Iris Year Book, 1933. Published by The Iris Society. The more infrequent the publication the more anxiously do I look forward to its arrival and this English Annual is certainly a case in point. As always the illustrations are exceptional—it is a pleasant habit, that of borrowing from current periodicals—and equally as always the text appeals to varied tastes and the inclusion of a list of “Iridaceae, other than Irises” suggest a broadening of activities that we might follow.

Mr. Mitchell writes of breeding; there are notes on *Iris arenaria* (*flavissima*) which by chromosome count should now be placed among the Regelias, *minuta*, *Rosenbachiana*, *innominata*, a Western American of Douglasiana type, and *Dykesii*. This last is reported as similar to *I. chrysographes* but darker and sturdier—its outstanding value, August to September (in England) bloom and a preference for partial shade.

Garden values are well-emphasized and, as last year, Miss Pesel offers most interesting suggestions. Varietal notes from America (Mrs. Hires), from England and from France recall to us many of our favorites and among the awards we find Mary Geddes, A. M., Pendell (Ayres) winning a Bronze Medal, and Meldoric recommended for trial at Wisley. It is worthy of note that in England also methods of award and of classification (color) create sharp discussion—also that a single stalk of a seedling on exhibit is now permitted “through the good offices of Major Stern.”

Of quite outstanding value is the article on Form by Mr. Wynn Hellings, in view of our increasing discussion of ratings and score cards. That he is familiar with our terms and early discussions (BULLETIN 2, p. 35; No. 10, p. 20) is clearly apparent and his selection of examples is most helpful. He expresses most clearly what we have all been thinking that, with the height now so usual in the novelties, the straight-hanging fall has marked display value over the flaring. Personally, I question whether the straight-hanging falls of W. R. Dykes display more color (proportionately) than the smoothly rounded silhouette of Queen Caterina or even of Anne Marie Cayeux.

SPECIES NOTES

Iris mellita Janka

■ In 1930, Doctor David Fairchild gathered a few rhizomes of a dwarf iris in a private garden in Constantinople, where it was grown under the name *Iris rubromarginata*. Sent in to the Division of Foreign Plant Introduction of the U. S. Department of Agriculture, it was grown at their station at Glenn Dale, Maryland, where the plant that furnished the illustration was grown. As this plant was made a variety of *mellita* by Dykes, our note is given under that heading, particularly as the plant seems to agree with the published critical notes, even to the comment on the variability or non-appearance of the red leaf margins which in our plants are not conspicuous, as we have grown it.

For some reason, possibly mere euphony, there is a charm in the name *mellita* that spurs one's hopes to a degree that is not justified when the flower appears for truth compels one to the statement that it is not a showy bloom and is of such hues that one condemns it with the trite adjective, interesting. In Dyke's description of the falls one finds the words "pale smoky brown veined with fine deep veins," the hafts having "a grey-white ground, veined with red brown"; the standards "deeper in color." It takes no imagination at all to tell that this is a dull affair with rather myopic beauties.

As there was some uncertainty as to the hardiness of the collected roots, they were planted in a cold pit, in pots that they have promptly filled with roots, giving in season their crowded fans of leaves and central flowers, with conspicuously long perianth tube.

This season the plants will be set out to see their behavior during the winter and their degree of evergreenness. Even if this should prove complete, one doubts if gardeners will be worried to possess it or to provide the sunny pocket in the rock garden and the limestone soil that Dykes recommends.

Iris foetidissima Linn.

Iris foetidissima is nothing new. Linnaeus knew it and woodcuts illustrating it are to be found in far older books such as Clusius and L'Obel, but it is not an iris often met in this coun-



Lilian A. Guernsey

IRIS MELLITA

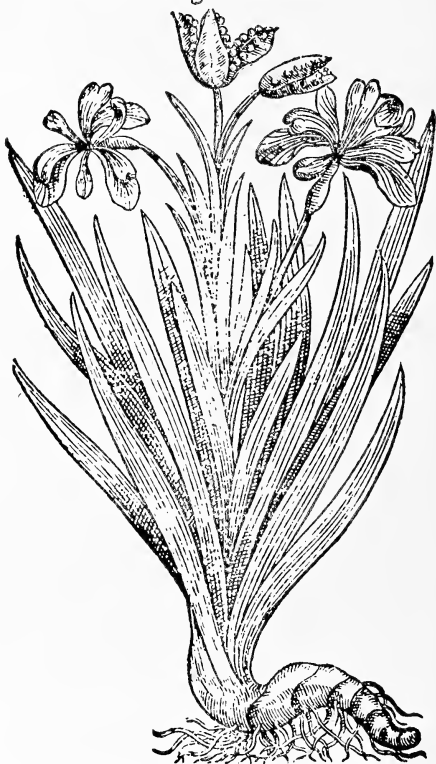
try. The woodcut is from Gerard's Herball. I saw it first in California where pods of its amazing seeds were set in a florist's window in the midst of chrysanthemums and the like.

In the garden here it makes a rather slow-growing clump of smooth, dark green, persistent leaves, not over eighteen inches tall, that have a curious odor when torn that gives the plant its specific name and the old English name of stinking gladwyn which is rather too coarse and vigorous an epithet. Its flowers are rather poor affairs with meager petals of an indeterminate mixture of dull lavender and brown, as if uncertain what they would become, and as they are borne on short stalks, well hidden in the leaves, they often pass unnoticed. They are followed by large green pods, something like those of *Iris Pseudacorus*, so heavy that they weigh down the short stalks and lie upon the ground unless supported by the foliage. Because of this the plant should be set in some low ground cover as the pods are sometimes rotted by contact with the moist soil.

In mid-September, while the pods are still bright, they burst open from the apex and display the large, soft-coated, bright orange-scarlet seeds that resemble those of no other iris.

If the stalks are cut and kept in water they last well and the pods continue to open until all the seeds are visible. I have had no great luck in keeping them beyond this stage, either in water or dried, for the succulent green pods turn brown and shrivel and the scarlet seed coats soon follow suit, but there may be some trick to this as yet undiscovered.

1 *Xyris*.
Stinking Gladdon.





Lilian A. Guernsey

IRIS FOETIDISSIMA

Iris unguicularis Poir.

Any gardener who has read English garden books, which means practically all of us, cannot possibly have failed to know this plant at least by name, either that at the head of this note or *Iris stylosa*, its one-time familiar name. Only those who have lived in California are likely to know it well, although there are many known examples in the East where it delights the gardener with its unseasonable flowering.

In my own garden its flowering depended much upon the weather. In years when November was mild and gave way to December with reluctance, a succession of flowers was in order; but if winter came promptly, there were no blooms until after the turn of the New Year, usually in the warm spells of February.

The illustration shows the general habit and style of the plant and flower. The evergreen leaves are tough and often dishevelled looking but the flowers rise through them with exquisite delicacy in sharpest contrast. The color is variable but well within the range of the lilacs and lavenders familiar among iris. There is also a pure white form, touched with gold in the throat, that is most lovely.

As the flowers are delightfully scented, they are particularly welcome when cut which they endure excellently in spite of the fact that each flower has relatively little stem and is carried up by a very elongate perianth tube. In cutting a sharp knife should be used and great care taken not to injure any other buds adjacent to the one cut. Then when the flower is brought in, place it in some room that is not overheated for a blossom that has been out-of-doors soon shrivels when brought into a heated room.

For the Californian there is no problem of cultivation; for the Easterner the matter resolves itself into an effort to find a compromise situation, a cold frame for the North, or an outdoor spot in the South, where winter growth will not be forced. Good drainage, summer sun, limey soil, and no excess of richness seem to be the necessary factors for success.

Hermodactylus tuberosus Salisb.

There was a time when this plant was included among the iris and even today it is sometimes so listed by commercial dealers and amateurs. The striking differences, as pointed out by Bailey, are



Donald Merrett ©

IRIS UNGUICULARIS

in the seed pod, which in iris is 3-celled and in this plant is one-celled.

Like many of the iris common to the Mediterranean shores, this plant was known far back in botanical and garden history. The wood cut reproduced happens to be from Dodoen's "*Stirpium Historiae*" of the edition of 1616 and was chosen because it happened to come to hand first, rather than because it represented the first illustration. Like most of its fellows, it shows very clearly the general habit of the plant.

It indicates no better than the accompanying photograph, the exquisite beauty of the pure sea-green colors of the flowers nor the richness of the velvety, almost inky black patch on the blade of each fall. Nor can it suggest the delicacy of the scent, a fragrance that has something of the evanescent sweetness of some of the violas.

My own first sight of the plant came in the old Botanic Garden at the University of California where its color combination first astonished me. Since then I have seen it in many places but never in my own garden, which is largely a matter of procrastination although there is the possibility that I am a little too far north for its best happiness. Like some other Mediterranean things, it may object to a winter that comes and goes intermittently.

Iris tuberosa.





Lilian A. Guernsey

HERMODACTYLUS (IRIS) TUBEROSUS

ASK ME ANOTHER

■ CULTIVATION. The contrasts of garden and field conditions, of what a plant prefers and of what it will endure and still give satisfactory bloom, are marked. Without entering into the broader field of difficult or unusual species the Bearded and the Beardless may prefer similar culture but the latter will endure more successfully sharp competition from other plants. When we naturalize the Bearded we must select poor well-drained soil where other growth is scarce or almost absent.

By cultivation I am referring to the tillage of the ground by plow, cultivator, or hoe close into the leaf sheaves and I am not concerned at present with the initial preparation of the ground and its fertilizing. Naturally in the handling of the established plant practical economic methods must be applied by the commercial grower in the field and the use of horse or hand cultivators or hoes is wholly dependent upon facilities the space allowed between rows. Normally the Siberians should have the deeper cultivation partly because they are deeper and more fibrous-rooted and partly because the deeper the mulch of loose soil, the more it holds moisture during drought.

Under garden conditions, however, such thorough cultivation is not a necessity and a clear area of dirt around each plant certainly does not enhance the garden effect nor permit of attractive massings. In part the omission of ALL cultivation except necessary hand weeding is possible because our normal garden soil is good and frequently fertilized. Our plants will flower without any effort on our part to eliminate all competition within their root range. Among the Beardless, many a garden is never quite rich and moist enough for even satisfactory bloom of the Japanese, Spurias, and possibly the new Louisiana species and their special care must frequently include frequent (ten-day interval) cultivation on at least two sides of the plant. In things like *Dorothea Williamson* (a *fulva* hybrid), this must be carefully done as the rhizomes are almost on the surface and the roots none too many.

The Bearded Irises are pronouncedly surface rooting, the new feeders beginning at, or just after, flowering if the weather per-

mits. Injury from cultivation is inevitable and must delay growth although I know of no experiments to prove the point. You may have noted that in setting a new plant only the most vigorous of the feeding roots develop branches and that the greater part of the growth is again from the rhizome. As this type of iris requires good drainage and plenty of sun, it does not require a moisture retentive mulch such as cultivation provides nor should active feeding roots be disturbed for a large percentage of them are very close to the surface. In our handling of bulbs we avoid planting them when in active growth in order to preserve feeding roots; the same principle applies as well to the bearded iris. Incidentally it means that our garden effect need not be sacrificed to culture and we can grow close matting things close up the leaf fans and must watch out only for over-shadowing neighbors which may be cut back or weeded out as we prefer. In suitable and usually rather poor but not too acid or wet a soil many a variety will thrive for a generation with no cultivation. And in a few cases of varieties that are slow to develop injury from cultivation must be more than over-balanced by good feeding. With all this in mind do not be too conscientious in the old custom of forking around the plants every spring and fall nor the newer custom of preserving a dirt mulch with a cultivator. Your garden will be more lovely with the plant not an oasis of green in a desert of dirt and your flowers may well still hold their own on the show table at need.



TID-BITS 33RD

■ ON COLOR COMBINATIONS. Such interesting articles by Miss Pesel, Mrs. Hires, Mr. Kinsey and others in the July BULLETIN are an irresistible temptation to add one or two of my own favorite colour combinations as a mark of my appreciation. Miss Pesel has voiced a widespread conviction in decrying the bright hard yellow irises, so difficult to use that I long ago banished the old ones I had (perhaps they were Mrs. Neubronner or Sherwin Wright) just as I never use tulips Mrs. Moon or Walter T. Ware. This strong yellow is good and enjoyable only in the late autumn in helenium or chrysanthemums when there are no colours left

in the garden except red-orange or brown. But in spring and summer it clashes with nearly everything—primrose, buff, or straw yellows are the hues that are invaluable, even more than white, to break up the monotony of iris groups.

The old and very free Mady Carriere with its light honey-colored standards gives contrast and lightness to many a blue group. I do not use many white iris and then chiefly by strong mauve pinks such as Cayeux's Alesia (the color of *Lavatera* Loveliness) or very dark ones or sometimes by blues, but I use many light colored iris such as Cherubin to lighten rich dark blends; Liberty by reddish ones; Mme. Chobaut by reds or dark purples or dark blues; and masses of Canari (syn. *Flavescens* Ed.) everywhere for nothing else gives the splashes of pale straw yellow I find so useful except some priceless new things and they are generally too tall and too large.

My irises are either in big triangular beds, or in a long bed bordering a road or in clumps on a curving walk which goes among olives and cedars and shrubs so that nowhere is there the priceless help of green grass or other flowers and they must provide their own contrasts and complements. There is one group at the beginning of the long bed which has been thoroughly satisfactory to owner and visitors; it contains the "best reds"; Hernani, Numa Roumestan, Victor Hugo, Gericault, Apache, Gaulois—and is interspersed with Frivolite, Midgard, Marquisette, Lona, Pheeda, and Liberty, with Floridor, Zulu, and Buto to give three contrasts of blue. With the afternoon sun at its back this planting glows like stained glass. Marquisette, Midgard, and Lona are three flesh-pink blends invaluable with red iris and they are also charming with pale blue. Louis Bel is extraordinarily effective placed here and there and is like underlining a sentence, nothing else I have seen has its dark effectiveness not even Mephisto, though Cayeux has a new one which seems as good or better.

Once I began with the pale colors leading up to the dark ones (a treatment not suited to large areas. Ed.) and found it gave a very monotonous and wishy-washy effect so now I frequently place a strong color against lighter ones and break up iris of similar coloring with contrasts.

Dark blue is more valuable than dark purple and iris like Joya, Sirius, Souv. de Mme. Gaudichau, Amneris, and Buto are good by reds, by whites, by yellows, and by pale blues.

Allies has a blue gun-metal sheen on its falls and is good when placed near Amneris and sometimes the red and white of Dalila (prettier than Folkwang or Mildred Presby) forms an attractive third.

The pale or medium lilacs can have only purple, white or soft pinks such as Our King near them. Like your correspondent who fell in love with Queen Caterina and Her Majesty, my heart was lost to Mlle. Schwartz and Arsace and I find the combination so deeply satisfying that I never part them and only occasionally add Ingres or a dark purple or a white.

One of the finest color combinations is blood red and dark violet purple. One cannot have it with iris alone—yet—but one can have Kochi and tulips Isis, Whistler, or Harry Veitch, or Kochi and the rose, Gruss an Teplitz. I have two quite indistinguishable intermediates, Charmant (supposedly a bit darker. Ed.) and Diamant and they are charming with pink tulips like Rosabella or Flamingo or the pink hybrid China roses like Laurette Messimy.

One of the editor's articles says iris must have a background (Perhaps I should have said "We must consider what we see beyond the iris"—a bitter need on the small place. Ed.) but I think they are finest with no background at all, swimming in light and sun; and are seen to perfection if they can be planted on a western hillside with only sky and setting sun behind them. (A magnificent and rarely attainable background. Ed.) My own iris garden has a tall hedge of cypress enclosing it and to my cost I know how hard it is to find good positions for the rich colors which "die" completely against the dark background. Pale colors show up well against it but strong ones turn muddy and the finest "reds" become like wine dregs.

It is so easy to forget one's impressions of colors that I now move my irises in full bloom or soon after and make preliminary trials by sticking the flowers in hollow bamboo canes two and three feet high and moving them about and placing them by other colors to see the effect, including that of height, until the desired result is reached.

When all is said and done a large iris planting tends to monotony and the basic purple color note threatens to swamp everything unless contrasts are carefully planned and the general "all-of-a-lilac-sameness" is broken up. For that reason one tends to clear *self* colors and an avoidance of the Niagara of blends. One or

two or even five may have been received with joy in the days of *pallida Dalmatica* and *Florentina* but now we are swamped by them. How much more effective is the small Victor Hugo with its brilliant strawberry red self color than fine tall blends like Cinabar or Coppersmith. I have not seen but feel it, too (quite rightly. Ed.), may not be the solid block of color one wants. For that reason Ingres, though small, is so much more satisfactory than huge creatures like Phryne. It gives an even cool grey lilac note. It will be hard to dislodge Floridor for the same reason; nothing else gives the same mass of grey slate blue with no violet, in so far as an iris can escape violet, and it is useful near whites, reds, yellows, pinks, in fact everything except lilacs and purples.

The need of color breaks among the true Germanicas—Kharput, Atropurpurea, etc.—which bloom here in Rome from Christmas on, must still be emphasized.—*Mary Senni*.

The Editor again hopes that our Southern contingent appreciates the similarity of conditions reported by Countess Senni. As lawns become poor and areas large, colors assume new values and irises flower over a longer season.

Though only three reports came in from California in response to our request for a list of favorites (none have been received from the South or Middle West by the Editor) I still think that listing at least non-Californian originations may prove suggestive: Kashmir White, *albicans*; True Delight, True Charm, Jeanne d'Arc; Autumn King, Souv. de Mme. Gaudichau, Souv. de Loetitia Michaud, Corrida; Seminole, Robert Wallace, Archeveque, Cardinal, Crimson King, Sindjkha, Mme. Durrand, Nancy Orne, Dora Longdon, Lent A. Williamson, Ambassadeur, Bruno, Tenebrae, Louis Bel. And among more recent introductions King Tut, Midgard, Indian Chief. It is interesting to note that in the two lists (one including few recent introductions) there are fewer rich blends by far (Dominion and Cardinal derivatives) originated in California if we judge by the two lists. Tenya and other real novelties would upset this deduction.

One of the things that a gardener may do with particular pleasure and delight in going through a museum is to search for his favorite garden flowers as they appear in the designs upon the objects exhibited. There are books, to be sure, that deal particularly with the subject of plants in relation to design but one need not have studied these to discover the plants of his affection, although they may contribute something to his understanding of the changes that appear in the representations as they will give him some insight into the modifications in appearance that must appear as a result of the medium of expression. For example a figure that passes through the weaver's hands must have certain square and diagonal qualities on account of the relations of warp and woof that may alter the contours of the images.

The frontispiece is the first of a series of illustrations that we hope to give that will show the iris as it appears in other places than the garden. How long the series will be remains to be seen, as the iris has not been used as much as some of the other familiar garden plants.

The illustration is from a photograph of a painted cotton hanging in the Metropolitan Museum of Art in New York City. It is an Indian piece from the early eighteen hundreds. The figures, being painted, are as free as any painting might be but are highly conventionalized, as any gardener can see, for no iris known to us has this sort of branching.

The flowers are the color of the cotton with veining and dotting of a dull reddish brown that is utterly unlike any plant that grows and must be taken purely as a decorative scheme. One suspects from the shape of the flowers themselves that *Iris albicans* may have been the inspiration of the drawing and as that is an iris commonly cultivated this conjecture is as good as any.

In the April issue it is hoped to show two pictures of the iris as used on cotton toweling designs from Japan. These in contrast to the present illustration, which shows a bearded iris, will show the use of apogons, one perhaps *Iris laevigata* and the other possibly *Iris Kaempferi*. Although the designs are really from stencils, like the present design they show the character of the brush work of the original painting from which the stencils were cut with the quality of the knife cutting more distinctly marked in the one than the other.

It will be appreciated by the editorial staff if members who have

knowledge of similar illustrations of the use of iris in design will call them to the attention of the Editor.

In spite of the fact that this part of the BULLETIN is really devoted to the intimate matters that relate to the growing of iris in the gardens of members all over the country and abroad, the Secretary is stealing a little space to ask your cooperation in establishing a correspondence that will bring him into closer touch with the things you are thinking about. It is a well known fact that the only persons who are vocal are those with complaints and it may well be that your Directors do not have a proper view of the mind of the Society if only the discontented make themselves heard. We are always anxious to hear about troubles but we would enjoy enormously hearing about your own particular pleasures and successes. We have the liveliest curiosity as to what you are growing in your garden and why! Do you grow your iris for effect in the garden or are you a collector? Do you grow your iris because you think they are beautiful or because some one told you that they were the best in the world? Are you so subservient to the opinions of others that you abandon your best loved iris because some one else says there are better ones or can you, in spite of all comers, sit in your garden and enjoy the beauty that is already yours? Or do you happen to be an athletic sort of gardener for whom the physical work and the winning of prizes represents the whole sum of iris activity? All of these are phases of iris activity and iris pleasures that your directors are anxious to know about. If you will tell us what you think, not only on these subjects but on any others that occur to you, we shall be in better position to serve you and to advance the interests of the Society. If you do not, we can only go ahead on our own initiative with results that may not be to your liking.

The Secretary should like to hear from members who have grown *Iris dichotoma* as to its behavior in their several gardens. I should like to know specially how long the individual plants lived and if they made an increasing number of stalks each year until they died. I should like to know also how whether or not there was any evidence of self-sowing from the abundant seed that is usually produced. If there was any considerable range of color variation, I should like to know if there were any individual plants that had a white ground without the usual lavender spotting? If such was the case, did seed from such plants produce any marked proportion of seedlings identical with the parent?

From plants grown here, the impression has been gained that old plants tend to flower much earlier in the season than do seedlings and that they are often a little earlier with each succeeding year. If you have data along this line, may we have it?

Reports are particularly desired from persons living in the northern and the southern states. If your garden is in the extreme North, and your plants died, we should like to know if they were in well drained soil and in relatively sheltered positions.

While there is no intention of ever making the BULLETIN of the Society into a general garden paper, we will all welcome information as to what plants other than iris are in bloom at the same season as bearded iris. Naturally this will be different for each garden. This is the sort of data that is most difficult to gather and reports will be particularly welcome from members who live in parts of the country that are not often featured in the gardening press. What happens in iris time in Idaho? In Arizona? in Texas? In West Virginia? In writing in, please be sure to tell a little something about your soil and climate. This is very important for the day is coming when we shall have to have such data in all plant reports, for all parts of the world, in order to properly interpret and translate any given report in terms of our own soil and climate.

The Secretary would like to have reports of growth of the several species that are illustrated in this number. How many members grow *Iris mellita*, *unguicularis*, *foetidissima* and *Hermodactylus tuberosus*. Reports on the behavior of the second species are particularly wanted from the East and Southeast.

If it is not too early to request it, may we ask members who have been growing the Louisiana species in their gardens to send in some sort of report on their behavior and value. We should be particularly interested to know if there are enough stalks of flowers to the mass of foliage to make the display valuable in a garden.

COMMERCIAL DIRECTORY

All of the dealers listed below are members of The American Iris Society. If you are buying iris for your garden, it should be your particular pleasure to make your purchases from the dealers who have worked with and supported your society. Your officers and directors invite your particular attention to this list. They also ask a favor. When you order, tell the dealer you saw his name in the BULLETIN and do him a favor by not asking for a catalog unless you mean business.

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T HERE are times when your officers doubt it. If you are reading this, please write to the secretary, whose address you must have read on the inside cover, and tell him what you like best in this issue. The editor would like to know, too.

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